MONITORING REPORT FOR 2014

STREAMSIDE TAILINGS OPERABLE UNIT
SILVER BOW CREEK/BUTTE AREA NPL SITE

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RESPEC

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EXECUTIVE SUMMARY

The performance monitoring program evaluates the progress of remedial actions in the Streamside Tailings Operable Unit (SSTOU) of Silver Bow Creek. Environmental media monitored in 2014 included surface water, instream sediment, groundwater, vadose zone water, macroinvertebrates and periphyton, fish, geomorphology, vegetation, soils, birds, and small mammals. This report summarizes results of data collected for each of these environmental media and evaluates progress toward attainment of performance goals as of 2014.[1]

For more than a century, from the 1870s through the 1980s, Silver Bow Creek received direct and indirect waste rock, slag (smelting byproduct), mill tailings, contaminated groundwater [Chadwick et al., 1985; Luoma et al. 2005], and raw municipal sewage inputs [Gless and Miller, 1973]. An estimated 2 million cubic meters of tailings were deposited directly into the stream [Luoma et al., 2005]. Prior to remediation, streamside tailings deposits were distributed along the entire length of the stream [Brook and Moore, 1989], and localized deposits reached depths of 5 meters. Much of the floodplain was devoid of vegetation due to the toxicity of floodplain tailings [Luoma et al., 2005]. Throughout the mining period (c., 1870 to 1982), the stream was utilized primarily as a sewer for the removal of industrial wastes.

In November 1995, the Montana Department of Environmental Quality (MDEQ) and the U.S. Environmental Protection Agency (USEPA) issued a Record of Decision (ROD) for Silver Bow Creek [MDEQ and USEPA, 1995] that identified the final site remedy and the agencies' rationale for selecting that remedy. The major remedial actions that resulted from the ROD include the excavation of tailings and related impacted soils from the floodplain of Silver Bow Creek, and the subsequent reconstruction of the stream channel and floodplain.

The portion of Silver Bow Creek, and the adjacent floodplain undergoing remediation under the consent decree settlement [Montana v. AR, 1998] is designated the SSTOU. The SSTOU is divided into four subareas based upon geologic and topographic features that control soil, hydrogeologic, geomorphic, surface water, ecological, demographic, and land use characteristics of the SSTOU [MDEQ and USEPA, 1995]. Each remedial subarea is further divided into remedial reaches, each approximately one mile in length.

Remedial actions include excavation of tailings and contaminated soils from the Silver Bow Creek floodplain, removal of those soils to a local repository or to the Opportunity Ponds, replacement of removed tailings with clean fill material, native grass seeding, some willow and shrub plantings, and complete channel reconstruction [USEPA, 2011]. Restoration actions involve various habitat improvements that include the addition of organic matter to the borrow soils and additional plant revegetation and aquatic habitat components [NRDP, 2005]. As of the

[1] The Record of Decision (ROD) identifies remediation goals and performance standards for surface water and groundwater. The performance monitoring program for the SSTOU evaluates a broader range of parameters than these ROD-required performance standards. The performance monitoring program identifies performance goals for the other parameters as a means of effectively discussing and evaluating the effectiveness of the remedy and restoration actions taken in the SSTOU. Use of the term "performance goal" or similar terms in this or other monitoring plans or reports is not intended to make each goal a ROD-required remediation goal or performance standard.

end of 2014, major remedial activity was complete in Subareas 1, 2, and 4; and remediation was in progress in Subarea 3.

Performance goals referenced in this report for surface water contaminants of concern (COC) were those specified by the SSTOU ROD. Specifically, the performance goal is for all samples collected in the SSTOU to "meet the more restrictive aquatic life or human health standards for surface water identified in MDEQ Circular WQB-7, through application of I-classification requirements" [MDEQ and USEPA, 1995]. The SSTOU ROD also specified that surface water monitoring should be conducted quarterly and identified a suite of water chemistry parameters to be monitored, including six metal contaminants of concern (COCs): arsenic, cadmium, copper, lead, mercury, and zinc. In 2014, seventeen sites were included in the monitoring network, including all sites specified by the SSTOU ROD: 13 sites in the SSTOU, two background sites in Silver Bow Creek which were previously contaminated and remediated but are located upstream from the SSTOU, and two reference sites located within the watershed but outside the area of primary contamination.

Surface water monitoring results indicate that remediation actions have improved water quality at sites where remediation has been completed. Metal COC concentrations at recently remediated sites in Subarea 3 and 4 are reduced from pre-remediation levels. However, COC concentrations remain elevated and at least one exceedance of the performance goals occurred at every site. Copper is the COC which most commonly exceeded the performance goals and at all but one site copper exceeded the performance goal during all quarters. In 2014, total recoverable copper concentrations exceeded the performance goal in 92% (48 of 52) of the SSTOU samples. The proportion of samples (n = 52) which exceeded the performance goals for other total recoverable metal COC concentrations in the SSTOU, in order of frequency, were mercury (71%), cadmium (33%), lead (10%), arsenic (8%), and zinc (4%). At the two background sites in Silver Bow Creek located upstream from the SSTOU, 25% (2 of 8) of the samples exceeded performance goals for arsenic, copper, and lead. In the reference sites (located in Blacktail Creek and German Gulch) 13% (1 of 8) of the samples exceeded the performance goal for copper but no other exceedances occurred.

As in previous monitoring years, nutrient concentrations (total nitrogen, nitrate plus nitrite, ammonia, and total phosphorus) were extremely high in the SSTOU. The SSTOU reach of Silver Bow Creek begins near the inflow of the Butte municipal wastewater treatment plant (WWTP) effluent, a major nutrient point-source [Plumb, 2009; Gammons et al., 2011]. All Silver Bow Creek and Blacktail Creek sites exceeded MDEQ summertime numerical standards for total nitrogen and total phosphorus [MDEQ, 2014a] during the September sample period. Nutrient concentrations increased substantially below the WWTP outfall during all quarters: total nitrogen and total phosphorous by four times or more and ammonia by as much as 140 times or more (from <0.05-7.00 mg/L). Ammonia exceeded the chronic ALS in 10% (5 of 52) of the samples collected downstream from the WWTP outfall during 2014. Nitrogen and phosphorus load estimates demonstrated that that the Butte WWTP continues to be the largest source of nitrogen and phosphorus (by far) to Silver Bow Creek. Nitrogen and phosphorus loads increase by approximately an order of magnitude downstream from the WWTP. It should be noted that ammonia had substantially lower concentrations during the summer (September)

sample period at the site immediately below the WWTP. This may be the result of increased effort to control ammonia in the WWTP discharge during warm periods of the year and to alleviate hypoxic conditions in Silver Bow Creek during the summer which are related to elevated ammonia discharge as a result of the excessive ammonia discharge [Gammons et al., 2011] .

Performance goals were not identified for instream sediment COCs in the SSTOU ROD [MDEQ and USEPA, 1995]. The 1998 Explanation of Significant Differences [MDEQ and USEPA, 1998] adopted criteria for sediment removal which provided for removal of the contaminated streambed material and replacement with clean material throughout the operable unit. In lieu of specific numeric performance goals for instream sediment, this monitoring program has identified consensus-based sediment quality guidelines including the "threshold effect concentrations" (TECs) and "probable effect concentrations" ([PECs) from MacDonald et al. [2000]. In addition to comparing sediment COC concentrations to those reference values, sediment monitoring in the SSTOU is conducted to determine the extent to which the streambed may be re-contaminated from upstream or other sources. As with surface water, the SSTOU ROD also specified that instream sediment monitoring be conducted quarterly at each surface water sampling site for each COC. During the December sample period, channel ice precluded the collection of samples from 2 of the 17 sites. Sediment samples were analyzed for COC concentrations in three size fractions (<0.065 mm, 0.065-1 mm, and 1-2 mm) and for the weighted mean concentration among those size fractions. In addition, the 2014 samples were analyzed as both wet weight and dry weight concentrations. From these data relationships were quantified between wet weight and dry weight concentrations to allow for estimation of dry weight concentrations from samples previously only analyzed as wet weight concentrations. The TEC and PEC reference values are assessed on a dry weight basis whereas all sediment sample concentrations from 2010-2013 were analyzed on a wet weight basis.

Weighted mean sediment COC concentrations in the SSTOU commonly exceeded the TEC (and often PEC) reference values at virtually all sites in 2014. However, at background sites located in previously contaminated and remediated portions of Silver Bow Creek upstream from the SSTOU, the magnitude of exceedances was particularly high. At reference sites, located in the watershed but outside the area of contamination, exceedances occurred but the magnitude of those exceedances was relatively low. The proportion of SSTOU samples (n = 51) which exceeded the TEC and PEC for weighted mean concentrations were: arsenic (74% and 32%), cadmium (90% and 10%), copper (100% and 56%), lead (75% and 20%), mercury (61% and 4%), and zinc (100% and 41%). The proportion of background samples (n = 8) which exceeded the TEC and PEC for weighted mean concentrations were: arsenic (100% and 50%), cadmium (75% and 13%), copper (100% and 75%), lead (100% and 50%), mercury (50% and 0%), and zinc (100% and 75%). The proportion of reference samples (n = 7) which exceeded the TEC and PEC for weighted mean concentrations were: arsenic (57% and 0%), cadmium (0% and 0%), copper (57% and 0%), lead (0% and 0%), mercury (0% and 0%), and zinc (14% and 0%).

As with surface water, the SSTOU ROD defined the performance goals for groundwater quality as having COC concentrations which, "Attain compliance with applicable Circular WQB-7 standards, federal MCLs (maximum contaminant levels) and federal nonzero maximum

contaminant level goals (MCLGs) for all SSTOU groundwater." Moreover, "The groundwater levels to be attained consist of the more stringent of the MCL, any nonzero MCLG, or the WQB-7 human health standard for each parameter." Groundwater was monitored at 30 wells in nine well clusters including 21 monitoring wells and nine reference wells. Eight well clusters were located in the Silver Bow Creek floodplain and one cluster was located near the Mine Waste Relocation Repository (MWRR). Wells in the MWRR were monitored during June and September of 2014, while the rest of the sites were monitored during September only.

In the floodplain well clusters in 2014, several COCs (arsenic, cadmium, and zinc) exceeded the performance goals in the monitoring wells but only arsenic and lead exceeded the performance goal in the background wells. Of the samples collected from the background wells in the floodplain clusters (n = 9), 22% exceeded the performance goal for arsenic and 11% exceeded the performance goal for lead. Of the samples collected from the monitoring wells in the floodplain clusters (n = 18), 11% exceeded the arsenic performance goal, 39% exceeded the cadmium performance goal, and 39% exceeded the zinc performance goal. In the MWRR cluster, only arsenic exceeded the performance goals and the only exceedance occurred in the background well.

Vadose zone water quality is monitored in the vicinity of the MWRR to assess mobility of COCs from the repository into the underlying groundwater supply and surface water in the SSTOU. As with groundwater monitoring in the MWRR, vadose zone water was monitored in June and September utilizing soil lysimeters (seven monitoring lysimeters and one background lysimeter). Monitoring at these same lysimeters has occurred each year since 2010. Performance goals were not established in the SSTOU ROD for vadose zone water. Instead, COC concentrations and other parameters (other metals, common ions, and physical parameters) are compared between the reference and monitoring lysimeters to assess potential differences which might be indicators of leaching of COCs from the repository.

Vadose zone water samples in 2014 had similar COC concentrations to prior monitoring years (2010-2013). From 2010-2014, arsenic concentrations in four monitoring lysimeters were significantly higher than in the background lysimeter. In addition, cadmium (in three monitoring lysimeters), copper (in two monitoring lysimeters), and zinc (in one monitoring lysimeter) concentrations were significantly higher than in the background lysimeter during the 2010-2014 period. It is unclear if these differences are related to inherent differences in soil chemistry between areas sampled by the background lysimeter and the monitoring lysimeters, or if the higher analyte concentrations in the monitoring lysimeters are related to the influence of the MWRR. Future results will be observed for any trend that may indicate leaching of COCs from the repository.

Biological (macroinvertebrate and periphyton) samples were collected at each surface water sampling site during the third quarter of 2014. As with other environmental media monitored which did not have ROD-specified performance goals, reference values from specific bioindices are used to evaluate macroinvertebrate and periphyton biointegrity. The Montana Valley and Foothill Prairies (MVFP) bioassessment index [Bollman, 1998] was used to evaluate macroinvertebrate biointegrity in the SSTOU. All SSTOU sites were either "moderately" or "severely" impaired for macroinvertebrate biointegrity (MVFP scores ranged from 11.1-50.0%).

In background sites located in Silver Bow Creek upstream from the SSTOU impairment at both sites was "severe" (MVFP scores were 11.1% at both sites) and in reference sites impairment was "moderate" in Blacktail Creek (MFWP score 27.8%) and "slight" in German Gulch (MVFP score was 61.1%). Stressors implicated as likely impairments to macroinvertebrate biointegrity at the SSTOU sites included nutrients (at all sites), sediments (at 10 of 13 sites), hypoxia (at 5 of 13 sites), and habitat disturbance (at 11 of 13 sites). Metals were not implicated as likely stressors to the macroinvertebrate assemblage at any SSTOU sites despite sediment metal concentrations which exceeded levels assumed to be likely to negatively affect the biota (i.e., the PEC).

The Montana Mountains diatom-based bioassessment [Bahls, 1993] was used to evaluate periphyton biointegrity in the SSTOU. All SSTOU sites were rated as "poor" or "fair" for periphyton biointegrity. In background sites located in Silver Bow Creek upstream from the SSTOU periphyton biointegrity ratings were "fair" and "good" and in reference sites impairment was "good" in Blacktail Creek and "fair" in German Gulch. Stressors implicated as likely impairments to the periphyton assemblage at the SSTOU sites included nutrients (at 5 of 13 sites), metals (at all sites), and hypoxia (at 3 of 13 sites).

Fish populations were sampled by electrofishing at six sample sites in Silver Bow Creek in March and October 2014. Each site has been sampled annually during the fall since 2008 (and earlier than 2008 at some sites) but spring sampling has not been regularly conducted. One sample site is located in each subarea of the SSTOU and two sites are located upstream from the SSTOU. Analyses included distribution and relative abundance (i.e., catch-per-unit-effort) estimates. Trout abundance appears to have leveled off at most sample sites. Longnose sucker abundance in Subarea 1 was lower than in some other years in Subarea 1. Sensitive species such as trout and sculpin were present at all sites in 2013 and native westslope cutthroat trout (or hybridized cutthroat trout) were present at four of those sites.

Stream geomorphology was monitored at four monitoring sites in the SSTOU including one site in Subarea 1 and three sites in Subarea 2 in 2014. The stream channel was generally within the reference value range at all sites for percent pools, proportion of undercut banks, and channel cover. Other geomorphic characteristics of the remediated channel were outside the reference range. Channel width to depth ratio exceeded the reference value range at all sites. Riparian cover and woody debris availability was below the reference range in all sites.

Revegetation monitoring within the SSTOU in 2014 examined Reaches B, C, J, K, and S. Revegetation in Reaches B and C has achieved the desired conditions. However, one expectation is that the desired conditions be achieved in years of "near-normal" precipitation, and 2014 was about 20% wetter than normal. Also, some repairs are planned in Reaches B and C and therefore re-evaluating vegetation conditions in Reaches B and C following those repairs would be beneficial. Revegetation appears satisfactory in Reach J where one field was harvested for hay which is a testament to the success of the revegetation efforts. The Greenway portion of Reach K is a revegetation showcase except for the old stream channel. Despite floodwaters scouring much of the Reach K floodplain in 2011 revegetation is generally satisfactory despite residual contamination in some portions of Reach K. The 2013 kochia thicket in Reach S impaired revegetation, but stocking is good, and it will probably look better next year.

Edaphically impaired revegetation can not always be clearly explained by suspect soil properties. Adapted species, unidentified soil characteristics, or other selective forces may be the cause of revegetation impairment at any particular location.

Soil monitoring was conducted in Subarea 1 in 2014. Results indicate that soil liming is unlikely to play an important role in remediating repair areas in upper Subarea 1, where residual contamination has worked its way to the surface in some places. Only three of 28 samples (11%) had pH <5.5 as reported by at least one soils lab, and these samples did not likely represent the most contaminated soils. A previous soils investigation indicated 11% of samples were impaired by acidity. The most contaminated soil class, comprising 40% of samples, averaged more than 15,000 ppm of three heavy metals summed (copper, manganese, and zinc). However, visible impairment also was evident in some "Class 1 soils", defined as having aggregate concentrations of copper, manganese, and zinc of <1,000 ppm.

Bird monitoring was conducted in Subarea 2 and 4 in 2014. Since monitoring began, 107 (Subarea 2) and 77 (Subarea 4) bird species have been identified in each location. More time has elapsed since major remedial actions were completed in Subarea 2. However, more previously unobserved bird species were observed in Subarea 2 in 2014 compared to Subarea 4. Gross bird use appears to establish quickly following revegetation. Habitat specialists, such as the willow flycatcher, appear to recolonize remediated areas later as habitat develops. Equitability (or evenness of use) among species appears to increase as species richness develops, with a stabilizing trend after about four years. Increasing equitability was most evident in late winter use. Differing bird use in different portions of a reach was common in Subarea 2 and 4. Wetlands were key habitat factors, but bridges and overpasses also were influential, particularly as habitat for cliff swallows.

Small mammal monitoring was conducted in the SSTOU in 2014 for the second year. Meadow voles were sampled in very high abundance in 2014 and deer mice were also more abundant than in 2013 in most habitats. Overall, mean captures per night increased from 7 to 35 captures per trap line per night from 2013 to 2014. Mean captures per trap line per night increased in woodland (tall shrub) habitat types from 5 to >40 between 2013 and 2014. An alfalfa-steppe habitat provided 1 capture per trap line per night in 2013 but 24 captures per trap line per night in 2014, and captured species were primarily deer mice.

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1.0 SURFACE WATER

1.1 INTRODUCTION

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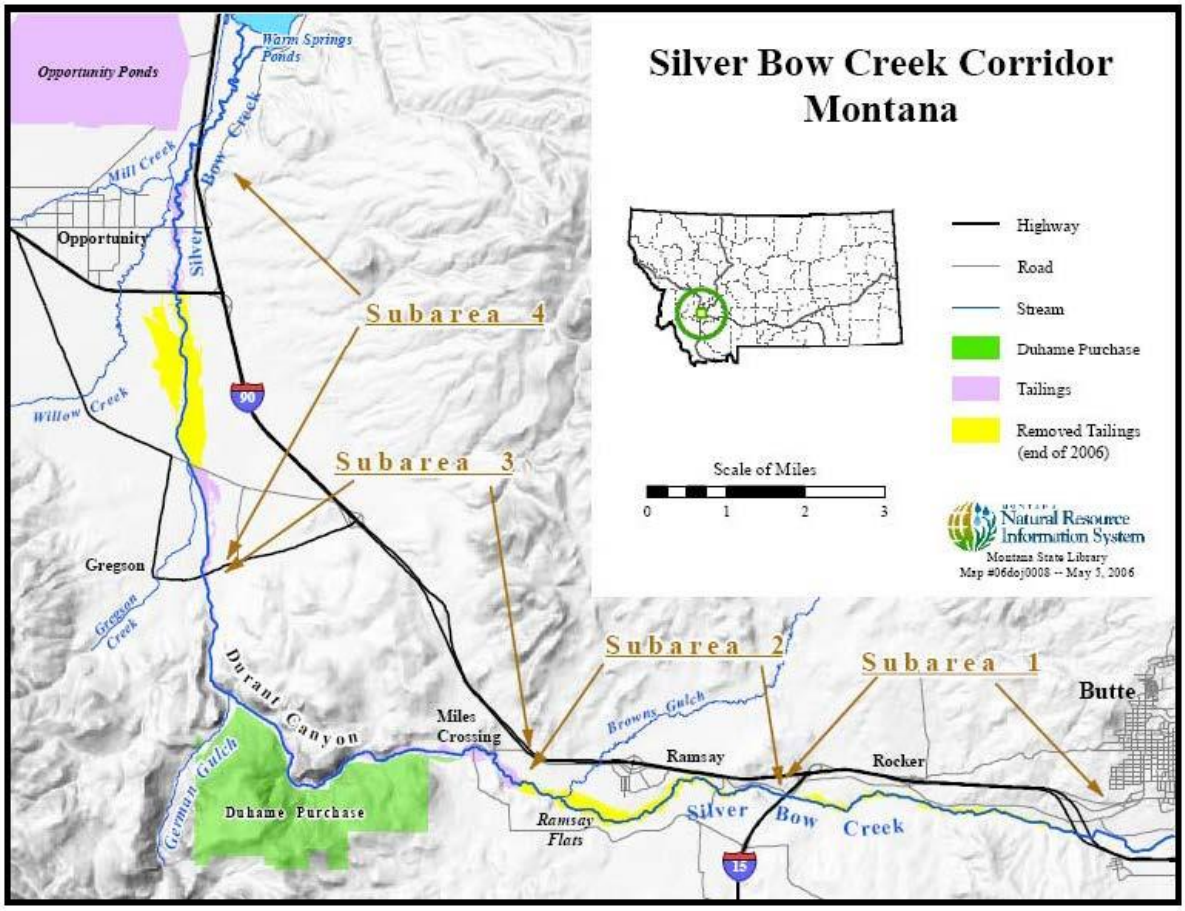

Figure 1-1. Remedial subareas of the Streamside Tailings Operable Unit [Source: MDEQ, 2014a].

1.2 PERFORMANCE GOALS

The SSTOU Record of Decision (ROD) specified that the final remediation goal for contaminant of concern (COC) concentrations in surface waters was to "meet the more

restrictive of aquatic life or human health standards for surface water identified in MDEQ Circular WQB-7, through application of I-classification requirements" [MDEQ and USEPA, 1995]. Since the issuance of the ROD, Circular WQB-7 [MDHES, 1994] has been replaced by Circular DEQ-7 [MDEQ, 2012a], and standards for some of COCs have been revised. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan (NCP) provide for use of the new, more stringent standards where compliance with the new standard is necessary to ensure protectiveness of human health and the environment. Although there has not yet been a formal decision to adopt the new, more stringent standards for the SSTOU, this report uses the more stringent of the ROD's Circular WQB-7 [MDHES, 1994] or current Circular DEQ-7 [MDEQ, 2012a] standards for evaluating compliance for the COCs.

The most restrictive surface water standard for each COC (arsenic, cadmium, copper, lead, mercury, and zinc) is either the chronic aquatic life standard (ALS) or the human health surface water standard (HHSWS) from either Circular WQB-7 [MDHES, 1994] or Circular DEQ-7 [MDEQ, 2012a]. In both versions, the chronic ALS is hardness-based for cadmium, copper, lead, and zinc. Thus, the chronic ALS vary in relation to water hardness for those metals, in all cases becoming less restrictive as water hardness increases. The most restrictive surface water standard for each COC is depicted in Table 1-1. This report uses the current Circular DEQ-7 [MDEQ, 2012a] standards as reference values for metals which are not COCs [Table 1-2].

The most current MDEQ Circular-7 surface water standards for each metal are identified in Table 1-2. Additionally, the SSTOU ROD specifies that the remedial action objective should "support the growth and propagation of fishes and associated aquatic life…including a self-sustaining population of trout species" provided that upstream contaminant sources are eliminated.

Silver Bow Creek is classified as an "I" stream under the Montana Water Quality Act [2001]. Designated beneficial uses for I-class streams are "drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming, and recreation; growth and propagation of fishes and associated aquatic life, waterfowl, and furbearers; and agricultural and industrial water supply". I-classified streams include the following criteria for physical properties of water:

- Dissolved oxygen concentration must not be reduced below the applicable standards given in Circular DEQ-7 (i.e., 1-day minimum = 3 mg/L) [MDEQ and USEPA, 1995; MDEQ, 2012a].
- Hydrogen ion concentration (pH) must be maintained within the range of 6.5 to 9.5.
- Except as permitted in 75-5-318, MCA, no increase in naturally occurring turbidity is allowed which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.
- No increase in naturally occurring temperature is allowed which will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.
- No increases are allowed above naturally occurring concentrations of sediment or suspended sediment (except as permitted in 75-5-318, MCA), and settleable solids, oils,

or floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife.

The SSTOU ROD did not specify nutrient (i.e., nitrogen and phosphorus) standards for surface waters in the SSTOU. However, base numeric nutrient standards have been adopted by the Montana Board of Environmental Review and MDEQ under rulemaking authority in 75-5-301(2) [Montana Code Annotated, 2013]. Department Circular DEQ-12A [MDEQ, 2014a] specifies the nutrient standards for wadeable streams in the Middle Rockies Ecoregion, which includes Silver Bow Creek and tributaries in the SSTOU. The following nutrient standards apply to streams in the SSTOU between July 1 and September 30:

- Total phosphorus = 0.03 mg/L,
- Total nitrogen = 0.3 mg/L.

In addition, Circular DEQ-7 [MDEQ, 2012a] specifies the following aquatic life standards (ALS) for total ammonia which are applicable year round[2]:

- Total ammonia acute ALS = 13.3 mg/L,
- Total ammonia chronic ALS = 3.97 mg/L.

In addition to the primary COCs, non-COCs and nutrients, measured surface water parameters included common cations and anions, total suspended sediment and field parameters including streamflow, water temperature, pH, conductivity, and turbidity. These additional data support the interpretation of water quality monitoring results and are needed to assess impairments to beneficial uses.

[2] The total ammonia acute ALS is inversely related to pH and water temperature (i.e., as pH and temperature increases the acute ALS decreases) and is also dependent on whether or not early life stage salmonids are present. The given standard assumes pH of 7.5 and that early life stage salmonids are present. Typically, pH in the SSTOU is at least 7.5 [Ingman et al., 2013a; 2013b; 2015a] and salmonids are known to be present in the SSTOU [see Section 6.0]. The chronic ALS for ammonia is not influenced by the presence or absence of early life stage salmonids.

Table 1-1. Comparison of the state of Montana surface water standards in July 1994 (effective at the time of issuance of the Streamside Tailings Operable Unit Record of Decision) and October 2012 (effective in 2014) for each contaminant of concern. Gray cells indicate the most restrictive standard.

Contaminant of concern[3]	Chronic aquatic life standard		Human health surface water standard	
	MDHES [1994]	MDEQ [2012a]	MDHES [1994]	MDEQ [2012a]
Arsenic	0.190	0.150	0.018	0.010
Cadmium	0.00113	0.00027	0.00500	0.00500
Copper	0.012	0.009	1.000	1.300
Lead[4]	0.0032	0.0032	0.0150	0.0150
Mercury	0.000012	0.000910	0.000140	0.000050
Zinc	0.10599	0.11982	5.00000	2.00000

[3] The aquatic life standards for cadmium, copper, lead, and zinc vary in relation to water hardness. The values displayed in this table correspond to a water hardness of 100 mg/L as $CaCO_3$.

[4] The chronic aquatic life standard is most restrictive for lead until hardness >338 mg/L as $CaCO_3$ At hardness >338 mg/L as $CaCO_3$, the human health surface water standard becomes more restrictive. Lead standards were the same in MDHES [1994] and MDEQ [2012a].

Table 1-2. Montana surface water standards for metals which are not contaminants of concern in the Streamside Tailings Operable Unit. [MDEQ, 2012a]. The most restrictive surface water standard for each contaminant of concern is to be used as the remediation standard for surface water in the Streamside Tailings Operable Unit [MDEQ and USEPA, 1995].

Metal[5]	Aquatic life standard (mg/L)		Human health surface water standard (mg/L)
	Acute	Chronic	
Aluminum	0.750	0.087	-
Antimony	-	-	0.0056
Barium	-	-	1
Beryllium	-	-	0.004
Boron	-	-	-
Chromium	-	-	0.1
Cobalt	-	-	-
Iron	-	1.00	-
Manganese	-	-	-
Molybdenum	-	-	-
Nickel	0.469	0.052	0.100
Selenium	0.020	0.005	0.050
Silver	0.0041	-	0.1000
Uranium	-	-	0.03
Vanadium	-	-	-

1.3 METHODS

The purpose of the surface water monitoring program is to collect data describing the temporal and spatial variation of metals and nutrient concentrations, and other physical properties of surface water in the SSTOU. These data provide a long-term record of environmental conditions in the SSTOU. As of 2014, 15 years of SSTOU surface water data (2000-2014) have been collected under this monitoring program. This long-term record provides a dataset to evaluate the effect of remediation on environmental conditions in the SSTOU over time.

Changes to the surface water monitoring program have occurred over time and a record of these changes is provided in the project sampling and analysis plan [Naughton et al., 2014a]. The program attempts to adhere to monitoring requirements specified in the SSTOU ROD [Table 1-3]. To comply with these requirements, surface water sampling sites were added to the monitoring network in 2013 (SS-13 and SS-16B) and 2014 (SS-19) [Figure 1-2; Table 1-4]. All of

[5] The aquatic life standards for nickel and silver vary in relation to water hardness. The values displayed in this table correspond to a water hardness of 100 mg/L as $CaCO_3$.

the sites required by the SSTOU ROD [Table 1-3] were included in the surface water monitoring program in 2014.

Table 1-3. Minimum post-remedy monitoring requirements for surface water monitoring specified in the Record of Decision for the Streamside Tailings Operable Unit [MDEQ and USEPA, 1995].

Locations/Physical	Analytical Parameters	Analytes
SS-07, SS-10, SS-13, SS-14, SS-15, SS-16, SS-17, SS-19	Metals (total recoverable and dissolved)	Arsenic, cadmium, copper, lead, mercury, zinc
	Common ions	Calcium, magnesium, sodium, potassium, chloride, sulfate
	Nutrients	Nitrate plus Nitrite Nitrogen, Phosphorus
	Physical properties	Temperature, acidity (pH), oxidation-reduction potential (Eh), conductance, dissolved oxygen concentration

1.3.1 Monitoring Locations

In 2014, remediation in the SSTOU was completed in all portions of Subareas 1, 2, and 4. Remediation was in progress in portions of Subarea 3 downstream from SS-15B [Figure 1-2]. Monitoring occurred at 17 sites, 13 of which were located within the SSTOU. Locations of some sampling sites were selected based on SSTOU ROD requirements [Table 1-3]. Other sites were selected to provide greater spatial resolution or to assess the influence of specific surface water inputs. Sites located outside the SSTOU were sampled to describe surface water conditions in the stream immediately upstream from the SSTOU (SS-01, SS-05A, SS-06G) or in a major tributary (German Gulch; SS-15G) entering Silver Bow Creek within the SSTOU [Figure 1-2].

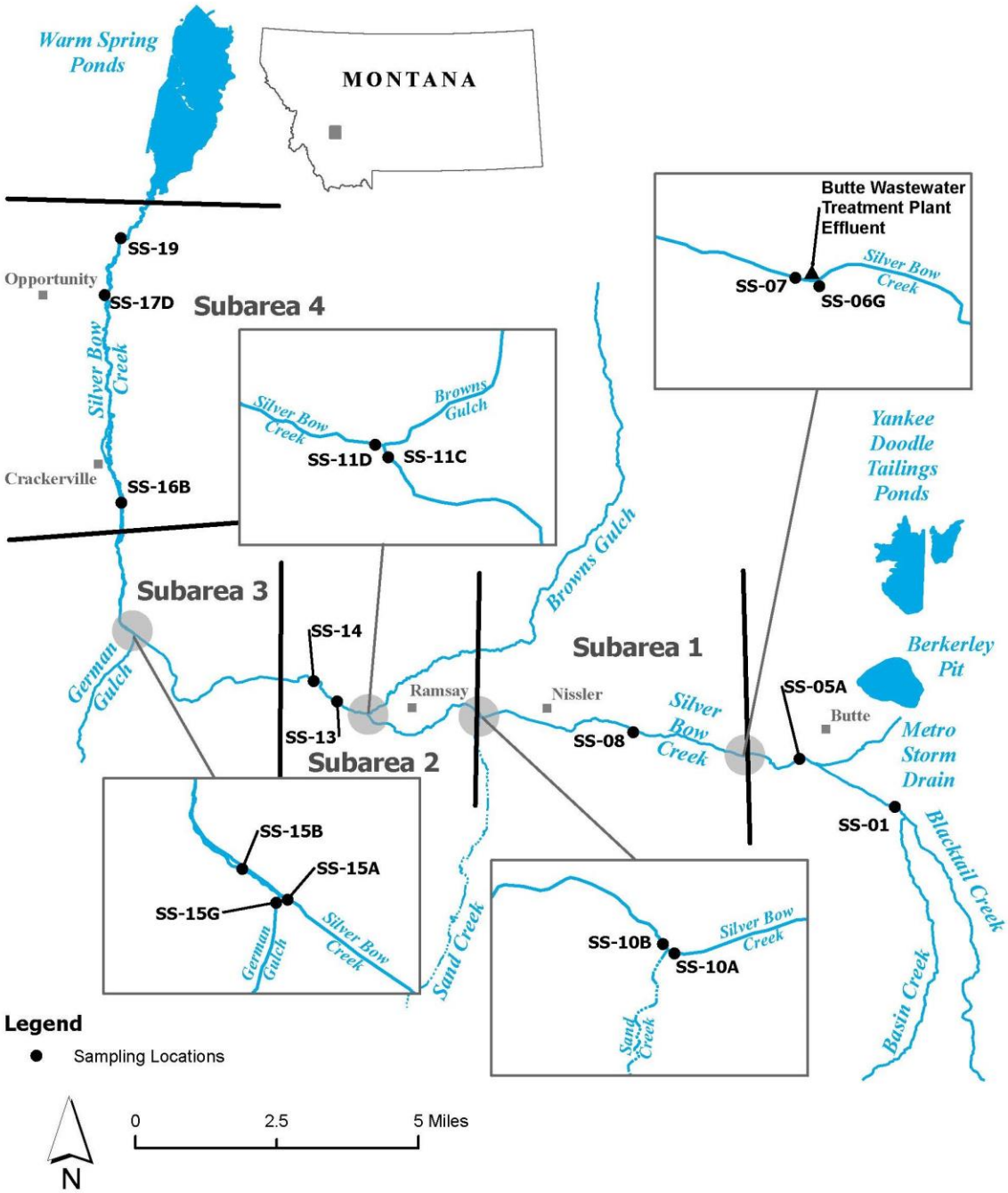

Figure 1-2. Surface water sampling locations in the Streamside Tailings Operable Unit, 2014.

Table 1-4. Surface water sampling locations in the Streamside Tailings Operable Unit, 2014.

Site ID	Site Location	Location (GPS coordinates, NAD 83)	
		Latitude	Longitude
SS-01	Blacktail Creek at Father Sheehan Park	45.98532	-112.50772
SS-05A	Silver Bow Creek above Butte Reduction Works	45.99653	-112.54343
SS-06G	Silver Bow Creek above WWTP	45.99648	-112.56316
SS-07[6]	Silver Bow Creek below WWTP	45.99679	-112.56470
SS-08	Silver Bow Creek at Rocker	46.00167	-112.60490
SS-10A	Silver Bow Creek above Sand Creek	46.00375	-112.66084
SS-10B	Silver Bow Creek below Sand Creek	46.00429	-112.66160
SS-11C	Silver Bow Creek above Browns Gulch	46.00336	-112.70172
SS-11D	Silver Bow Creek below Browns Gulch	46.00342	-112.70304
SS-13	Silver Bow Creek in Reach L	46.00647	-112.71394
SS-14	Silver Bow Creek at Miles Crossing	46.01142	-112.72270
SS-15A	Silver Bow Creek above German Gulch	46.02170	-112.78969
SS-15B	Silver Bow Creek below German Gulch	46.02263	-112.79175
SS-15G	German Gulch near confluence	46.02170	-112.79029
SS-16	Silver Bow Creek in Reach P near Fairmont	46.05494	-112.79611
SS-17D[7]	Silver Bow Creek below Stewart Street at Opportunity	46.10787	-112.80553
SS-19	Silver Bow Creek at Frontage Road	46.12247	-112.80032

1.3.2 Monitoring Schedule

Monitoring events were scheduled quarterly to describe seasonal variation in water chemistry within the SSTOU. One monitoring event occurred during each calendar quarter. Quarterly monitoring events occurred near the end of each quarter. First quarter (Q1) monitoring occurred from March 24–25 prior to spring snowmelt runoff. Second quarter (Q2) monitoring occurred from June 2-3, near the peak of the spring snowmelt runoff period. Third quarter (Q3) monitoring occurred from September 9-11, during low streamflow conditions. Fourth quarter (Q4) monitoring occurred from December 3-4, during late fall.

1.3.3 Monitoring Parameters

Streamflows were measured at all surface water sampling sites at the time when sampling occurred. At two sites, streamflows were determined from USGS streamflow gauges that were co-located with the sampling sites. At sites without co-located USGS gauge stations,

[6] Co-located with USGS streamflow gauge 12323250.

[7] Co-located with USGS streamflow gauge 12323600.

streamflows were measured manually. Laboratory analysis of analyte concentrations in samples was provided by Energy Laboratories (Helena, Montana). Water samples were analyzed for metal concentrations, nutrient concentrations, and other chemical and physical properties [Table 1-5].

Table 1-5. Sampling parameters and analytes for surface water monitoring of the Streamside Tailings Operable Unit, 2014.

Parameter	Analytes
Concentrations of metal contaminants of concern (total recoverable and dissolved)	Arsenic, cadmium, copper, lead, mercury, zinc
Concentrations of other metals (total recoverable and dissolved)	Aluminum, antimony, barium, beryllium, boron, cobalt, chromium, iron, manganese, molybdenum, nickel, selenium, uranium, vanadium
Nutrient concentrations	Nitrogen (total nitrogen, nitrate plus nitrite, ammonia), phosphorus (total)
Common ion concentrations	Sulfate, total alkalinity, bicarbonate alkalinity, calcium, magnesium, sodium, potassium, chloride, and sulfate
Other physical properties	Total suspended sediment (TSS) concentration, water hardness, water temperature, pH, specific conductivity, dissolved oxygen (DO), turbidity

1.3.4 Sample Collection and Analysis

Sample collection, analysis, and quality assurance procedures are described in the program sampling and analysis plan [Naughton et al., 2014a] and quality assurance project plan [Naughton et al., 2014b]. Methods generally followed standard operating procedures (SOPs) developed for the Clark Fork River [AR, 1992]. Field sampling procedures were in accordance with MDEQ [2012b] and followed "clean hands/dirty hands" procedures as described in USGS [2006][8]. Composited surface water samples were collected using width-depth integration according to methods described in USGS [2006]. Field parameters (water temperature, pH, dissolved oxygen concentration, and conductivity) were measured during each monitoring event with a field multimeter (YSI Professional Plus). Turbidity was measured with a field turbidity meter (Hach Model 2100P Portable Turbidimeter). Streamflows were measured using a portable electromagnetic streamflow meter (Marsh-McBirney Flo-Mate 2000). Calibration methods for field meters, data recording and handling methods, and quality assurance and quality control procedures are described in the program monitoring plan [Naughton et al., 2014a]. Samples were analyzed by Energy Laboratories (Helena, Montana). Laboratory analysis procedures for each analyte are presented in Table 1-6.

[8] We deviated from the USGS [2006] protocols to minimize sample contamination [described in Section 4.0.2] in two regards. First, we did not collect samples sequentially in the order of least to greatest potential for contamination. Second, samples were processed outside sampling vehicles, rather than within an enclosed space. Also note that we did not follow all "clean hands/dirty hands" protocols of Method 1669 [USEPA, 1996] or the low-level (i.e., part-per-trillion) protocols of the USGS [Lewis and Brigham, 2004].

Table 1-6. Analytes, analytical methods, and reporting limits for surface water samples in the Streamside Tailings Operable Unit, 2014.

Analyte	Requested Method	Requested Reporting Limit (mg/L)[9]	Holding Time (days)	Bottle	Preservative
Water Samples - Physical Properties and Inorganics					
Sediment, Total Suspended (at 105C)	A 2540 D	1	7	1 L HDPE	4 ± 2 C
Alkalinity, Total (as CaCO3)	A 2320 B	4	14	500 mL HDPE	
Alkalinity, Bicarbonate (as HCO3)	A 2320 B	4	14		
Chloride	EPA 300.0	1	28		
Sulfate	EPA 300.0	1	28		
Hardness (as CaCO3)	A 2340 B	1	180		
Water Samples – Nutrients					
Nitrogen, Ammonia (as N)	EPA 350.1	0.05	28	250 mL HDPE	4 ± 2 C
Nitrogen, Nitrate-Nitrite (as N)	EPA 353.2	0.02	28		H2SO4 to pH <2, 4 ± 2 C
Nitrogen, Total	A 4500 N-C	0.05	30		4 ± 2 C
Phosphorus, Total	EPA 365.1	0.003	28		H2SO4 to pH <2, 4 ± 2 C
Water Samples - Dissolved Metals (0.45 µm filtered)					
Aluminum	EPA 200.8	0.009	180	250 mL HDPE	HNO3 to pH <2
Antimony	EPA 200.8	0.0005			
Arsenic	EPA 200.8	0.001			
Barium	EPA 200.8	0.003			
Beryllium	EPA 200.8	0.0008			
Boron	EPA 200.8	0.1			
Cadmium	EPA 200.8	0.00003			
Calcium	EPA 200.8	1			
Chromium	EPA 200.8	0.01			
Cobalt	EPA 200.8	0.01			
Copper	EPA 200.8	0.001			
Iron	EPA 200.8	0.02			
Lead	EPA 200.8	0.0003			
Magnesium	EPA 200.8	1			
Manganese	EPA 200.8	0.001			
Molybdenum	EPA 200.8	0.005			
Nickel	EPA 200.8	0.002			
Potassium	EPA 200.8	1			
Selenium	EPA 200.8	0.001			
Silver	EPA 200.8	0.0002			
Sodium	EPA 200.8	1			
Uranium	EPA 200.8	0.0002			
Vanadium	EPA 200.8	0.1			
Zinc	EPA 200.8	0.008			
Mercury	EPA 245.1	0.000005	28		
Water Samples - Total Recoverable Metals					
Total Recoverable Metals Digestion	EPA 200.2	-	-	-	-

[9] Requested reporting limits are either the required reporting limit from MDEQ [2012a] or MDEQ [2014b] (for nutrients), or the lowest reporting limit previously provided by the analytical laboratory, whichever is lower.

Aluminum	EPA 200.8	0.009	180	250 mL HDPE	HNO3 to pH <2
Antimony	EPA 200.8	0.0005			
Arsenic	EPA 200.8	0.001			
Barium	EPA 200.8	0.003			
Beryllium	EPA 200.8	0.0008			
Boron	EPA 200.8	0.1			
Cadmium	EPA 200.8	0.00003			
Calcium	EPA 200.8	1			
Chromium	EPA 200.8	0.01			
Cobalt	EPA 200.8	0.01			
Copper	EPA 200.8	0.001			
Iron	EPA 200.8	0.02			
Lead	EPA 200.8	0.0003			
Magnesium	EPA 200.8	1			
Manganese	EPA 200.8	0.001			
Mercury	EPA 245.1	0.000005			
Molybdenum	EPA 200.8	0.005			
Nickel	EPA 200.8	0.002			
Potassium	EPA 200.8	1			
Selenium	EPA 200.8	0.001			
Silver	EPA 200.8	0.0002			
Sodium	EPA 200.8	1			
Uranium	EPA 200.8	0.0002			
Vanadium	EPA 200.8	0.1			
Zinc	EPA 200.8	0.008			

1.3.5 Data Analysis

Data analysis included description of spatial trends and temporal (quarterly and annual) trends in analyte (metals and nutrients) concentrations and physical properties. Attainment of performance goals was assessed by comparing analyte concentrations at specific sites to the relevant standards. In addition, spatial and temporal contaminant loading trends were examined to assess contaminant sources and transport dynamics.

Evaluation of some ALS standards requires an assumption that the measured analyte concentrations are consistent over time. For example, the chronic ALS is typically based on 96-hour mean concentrations and the acute ALS are typically based on 1-hour mean concentrations [MDEQ, 2012a]. However, in this monitoring program, analyte concentrations are measured at a specific point in time and mean concentrations over time are unknown. Therefore, all assessments of ALS exceedances assume that the measured concentration was representative of the mean concentration over the necessary time period.

Assessment of nutrient monitoring results included: 1) comparisons of total nitrogen, nitrate plus nitrite nitrogen, and total phosphorous concentrations to reference concentrations; 2) examination of spatial patterns for total nitrogen and total phosphorous loads as indicators of nutrient sources; and 3) evaluation of total ammonia concentrations in relation to pH and water temperature-dependent ammonia ALS.

Compliance ratios were computed for the COC metals by dividing each metal concentration from 2005-2014 by the respective performance goal. Compliance ratio results are presented as line graphs on a logarithmic scale ranging from 0.01 to 100, with a value of 1.0 corresponding to 100% of the performance standard value. Values exceeding 1.0 represent exceedances of the

performance goal. Compliance ratios are presented at a subsample of Silver Bow Creek sites which have monitoring data extending back to 2005 including: Silver Bow Creek below the WWTP (SS-07), Silver Bow Creek at Rocker (SS-08), Silver Bow Creek above Sand Creek (SS-10A), Silver Bow Creek below Sand Creek (SS-10B), Silver Bow Creek below Browns Gulch (SS-11D), and Silver Bow Creek below Stewart Street at Opportunity (SS-17D).

Load estimates were calculated from the instream analyte concentration data and the instantaneous streamflows gauged at the time of sampling or obtained from the USGS for their co-located streamflow gauging stations. Load data provide some insight into temporal and spatial characteristics of analyte transport and sources within and upstream from the SSTOU. However, it should be noted that load data do not take into account river travel times because monitoring was not performed with regard to river travel times and also does not account for potential influences of rapidly changing instream conditions during some monitoring events which may be related to variation in discharge from the Butte wastewater treatment plant. Those factors may account for some of the apparent gains or losses in loading between monitoring stations during any of the four monitoring events.

Finally, surface water samples were analyzed for COC and non-COC metal and metalloid concentrations. The SSTOU ROD specifies that monitoring should assess if non-COC metals have concentrations exceeding performance goals [MDEQ and USEPA, 1995]. We have interpreted the performance goals for non-COC analytes to be the most restrictive of the most current Circular DEQ-7 standards [MDEQ, 2012a].

1.3.6 Data Validation

Data quality objectives (DQOs) were established in the SSTOU quality assurance project plan (QAPP) for "data representativeness", "comparability", "completeness", "sensitivity", "precision", "bias", and "accuracy" [Naughton et al., 2014b]. Methods for field and laboratory quality assurance and quality control (QA/QC) procedures are described in detail in the QAPP. A completed QA/QC checklist, summary tables of field duplicate and field blank results, and assessments of data quality objectives are included in Appendix A.

1.4 RESULTS

1.4.1 Streamflows

The 2014 monitoring year was characterized by variable streamflows in Silver Bow Creek and its tributaries. Streamflows ranged from average to well above average depending on the time of year. Streamflows were about normal in January and February at the three reference USGS gauging stations [Figure 1-3; Figure 1-4; Figure 1-5]. The March through May period saw generally well above average streamflows, including a March winter warming event that produced unusually high streamflows, and an earlier than normal spring snowmelt runoff which produced peak streamflows in mid-May. Streamflows were variable but more or less

normal in the June through July period, based on long-term USGS records, and above normal in the mid-August through October period.

First quarter surface water quality monitoring was conducted after the unseasonably high streamflows associated with the winter thaw event. The second quarter monitoring event, missed the annual peak of streamflow by approximately one week. Streamflows were above normal and declining during the third quarter monitoring event and near normal during the fourth quarter event.

Streamflows at the Blacktail and Silver Bow Creek USGS gauging stations during the 2014 calendar year are depicted in hydrographs; from three USGS gaging stations: Blacktail Creek at Butte (USGS 12323240) [Figure 1-3], Silver Bow Creek below Blacktail Creek at Butte (USGS 12323250) [Figure 1-4], and Silver Bow Creek at Opportunity (USGS 12323600) [**Figure 1-5**]. The hydrographs also show the long-term median daily streamflows at those locations, based on the available (22-30 year) period of record. Figure 1-6 depicts streamflows measured by RESPEC or the USGS at each of the SSTOU monitoring stations. Streamflows depicted for Silver Bow Creek below the Butte WWTP (SS-07) and Silver Bow Creek below Stewart Street at Opportunity (SS-17D) reflect USGS daily mean streamflows for those sites during each quarterly monitoring event.

Spatial patterns in streamflows during 2014 consisted of gradually increasing streamflows between the Blacktail Creek at Father Sheehan Park station and the Silver Bow Creek at Miles Crossing station, followed by more abrupt increases from above to below the German Gulch confluence [Figure 1-6]. Apparent losses in streamflow in Silver Bow Creek were noted during one or more quarterly monitoring events in the stream segment from below the Butte WWTP to above Sand Creek (Q3), from Rocker to below Sand Creek (Q4), from above to below Sand Creek (Q2), from the site in Reach L or Miles Crossing to above German Gulch (Q1, Q2, Q3), and from below German Gulch to the site in Reach P (Q1, Q2) [Figure 1-6].

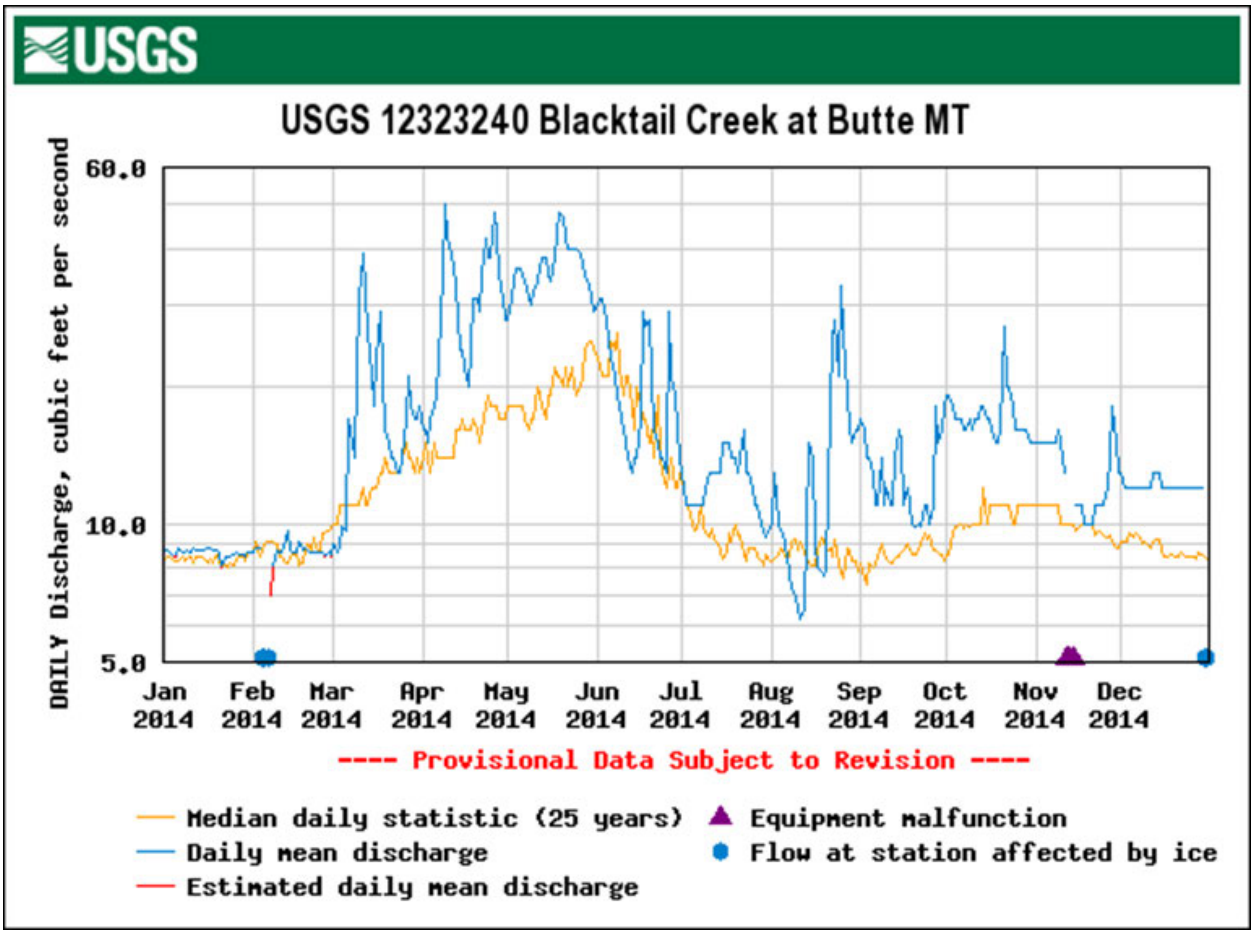

Figure 1-3. Hydrograph for Blacktail Creek at Butte, Montana, 2014.

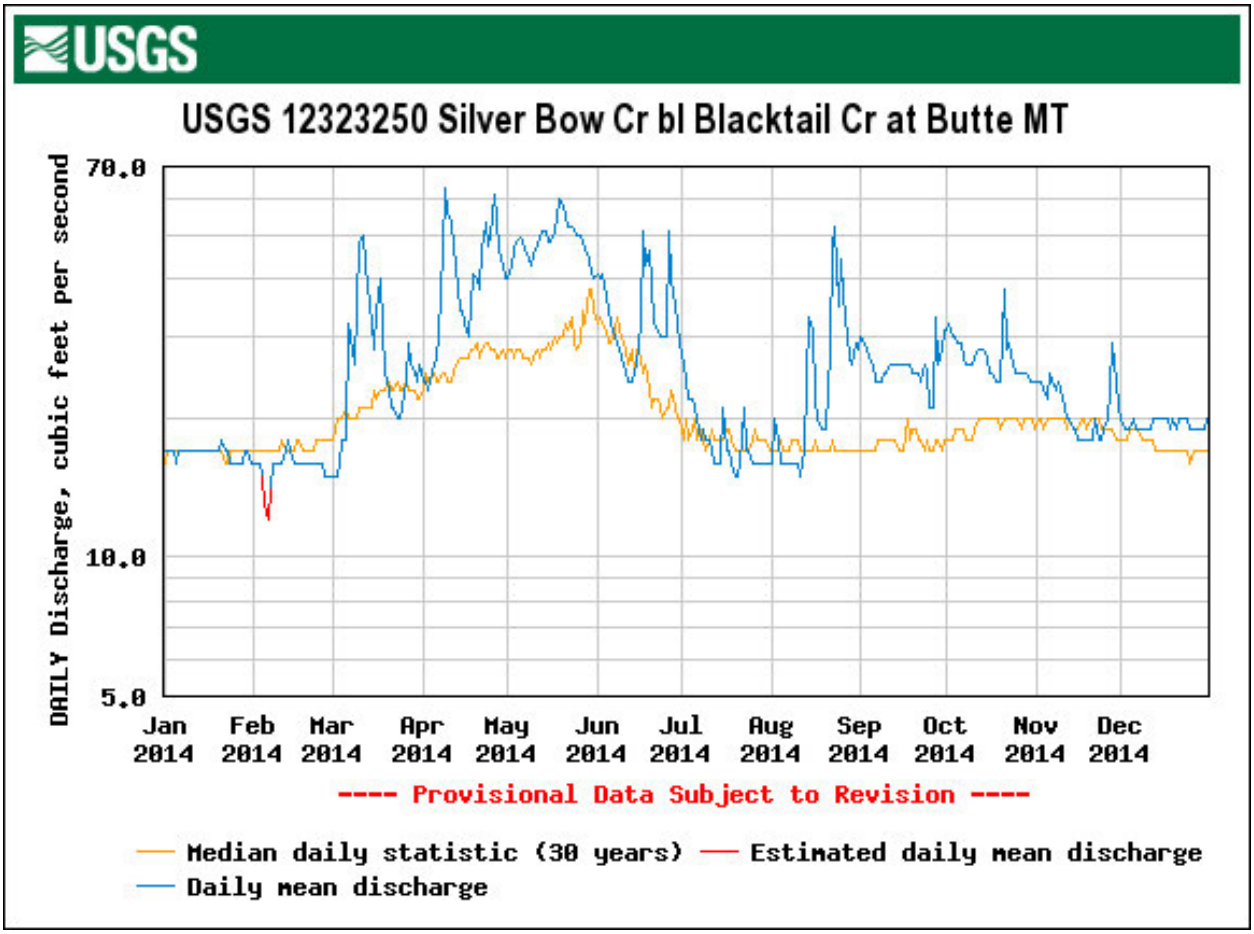

Figure 1-4. Hydrograph for Silver Bow Creek below Blacktail Creek at Butte, Montana, 2014.

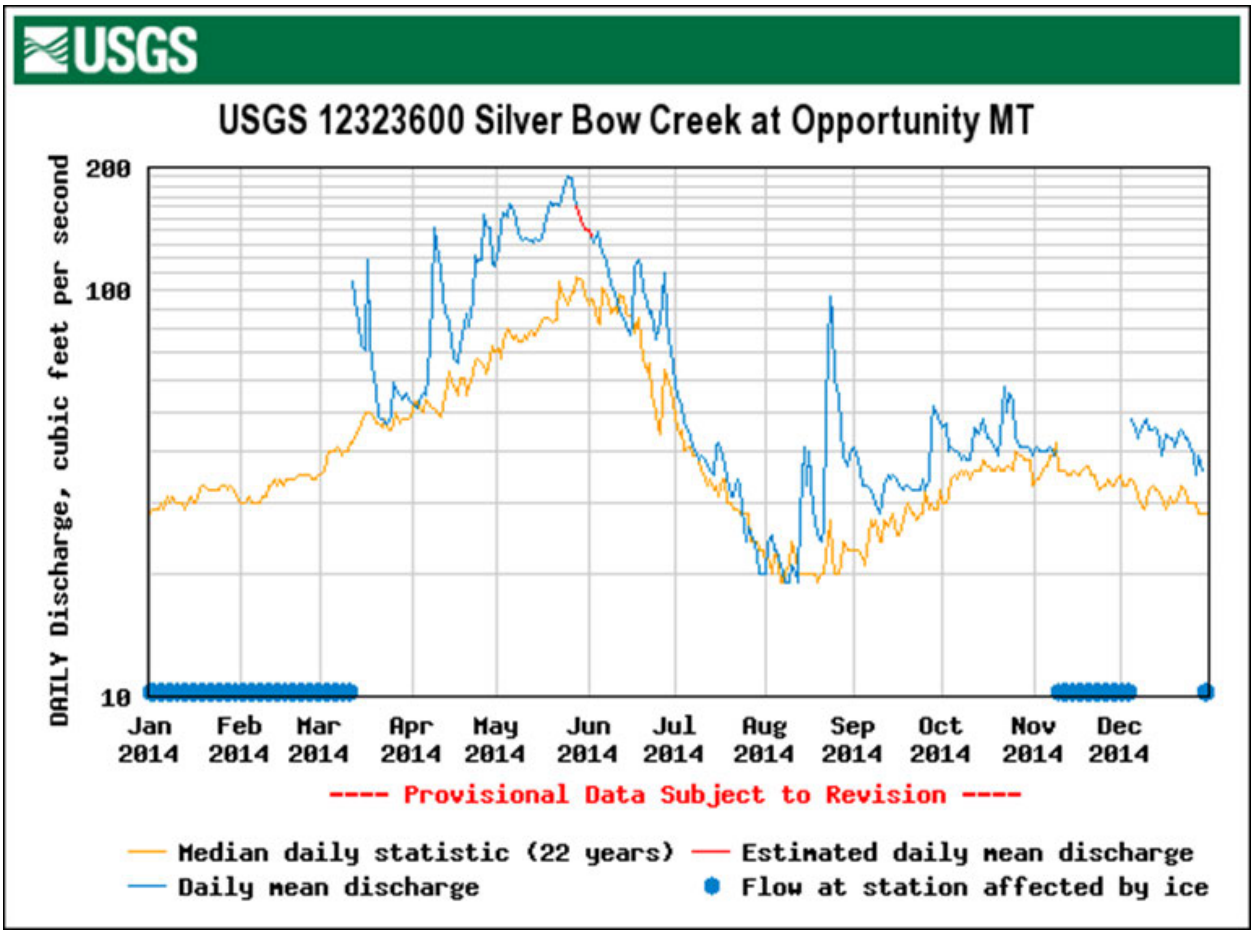

Figure 1-5. Hydrograph for Silver Bow Creek at Opportunity, Montana, 2014.

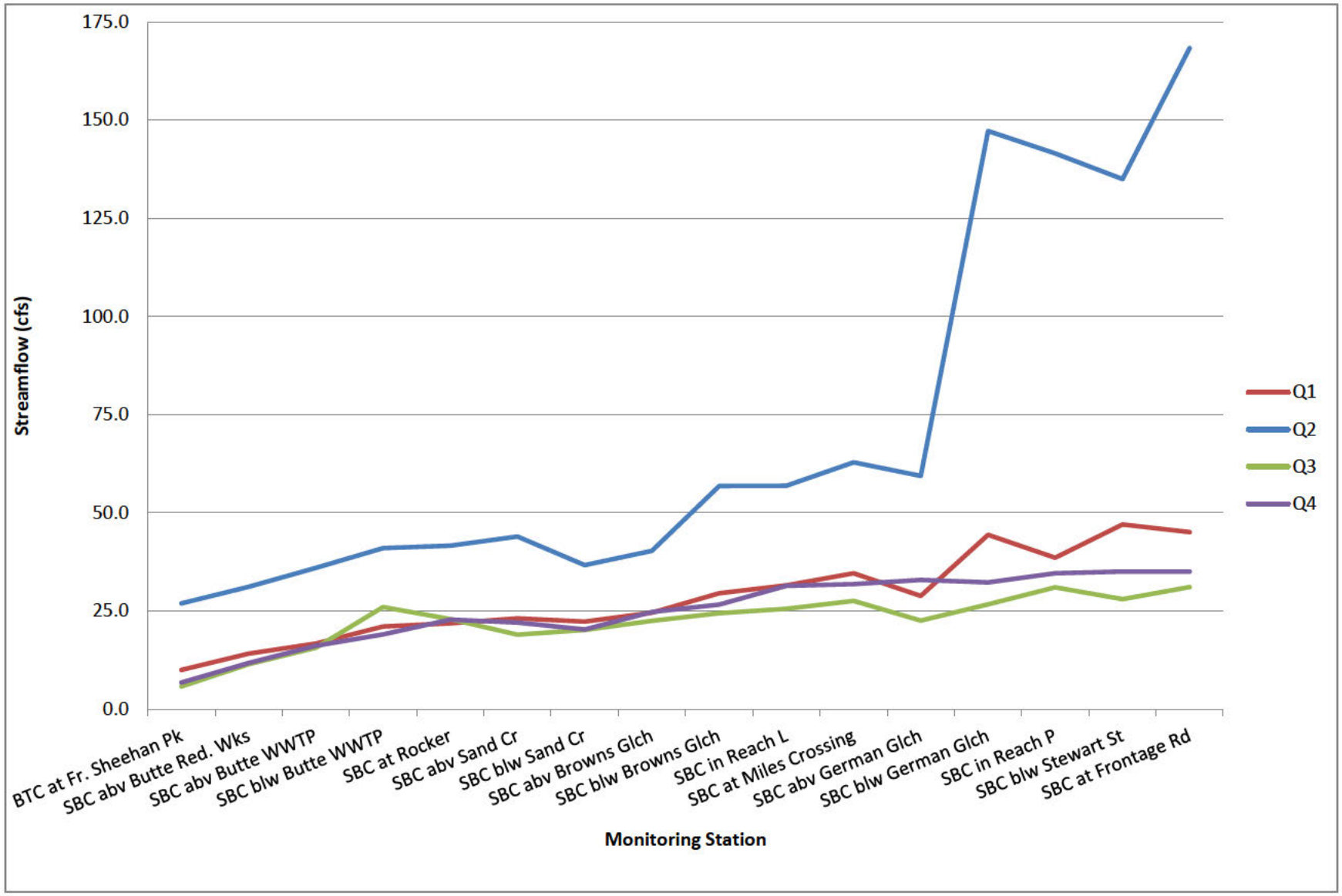

Figure 1-6. Streamflows at Streamside Tailings Operable Unit monitoring stations, 2014.

1.4.2 Field Parameters

1.4.2.1 Water Temperature

Water temperatures in the SSTOU in 2014 were consistently below 20 C [Figure 1-7]. Highest water temperatures during the four quarterly monitoring events were observed most frequently in Q2 (12 of 17 stations), followed by Q3 (5 of 17 stations).

The Butte wastewater treatment plant (WWTP) and German Gulch inflows appeared to influence water temperatures in the Silver Bow Creek mainstem on a seasonal basis. During the Q4 monitoring event, water temperatures in Silver Bow Creek were nearly 3 C warmer downstream from the WWTP outfall than immediately upstream from the outfall. Effects of the WWTP discharge on instream water temperatures were less notable in 2014 compared to 2013 and prior monitoring years [Ingman et al., 2015]. Water temperatures in Silver Bow Creek downstream from the German Gulch confluence were 2.5-5.5 C cooler than immediately upstream from the confluence during the Q1 and Q2 monitoring events.

Among the 17 SSTOU monitoring stations, the highest water temperatures during 2014 were observed in Silver Bow Creek in Reach L and at Miles Crossing. Lowest water temperatures were usually observed in German Gulch, and at Silver Bow Creek monitoring stations located downstream from German Gulch.

Water temperatures at SSTOU monitoring stations during 2014 were somewhat lower, on average, than those measured in 2013.

1.4.2.2 Acidity

All pH measurements in the SSTOU in 2014 were within the 6.5–9.5 range which is the goal for I-classification streams [Figure 1-8]. The highest pH values and greatest variability among sites occurred in Q3 of 2014. The lowest pH values were recorded in German Gulch and in Silver Bow Creek at Frontage Road during Q2, with values of 6.57 and 6.93, respectively. Seasonally, the lowest pH values and the smallest variability between stations were observed during the Q2 (9 of 17 sites) or Q4 (8 of 17 sites) monitoring events.

Field pH values measured during the four quarterly monitoring events in 2014 showed similar variability (range of 6.57 to 9.02) to that in 2013 (range of 7.13 to 9.26), but somewhat more variability than in 2012 (range of 7.56 to 8.88).

1.4.2.3 Conductivity

The highest conductivities at all of the SSTOU monitoring stations were observed during the Q4 monitoring event when streamflows were at a winter base streamflow level [Figure 1-9]. The lowest conductivities at all stations were observed in Q2, during snowmelt runoff conditions. Conductivity tended to increase gradually from the upper-most monitoring station, Blacktail Creek at Father Sheehan Park, downstream to the Butte WWTP then remained more or less static to German Gulch. Below the German Gulch confluence a decrease in conductivity was observed at the four downstream Silver Bow Creek monitoring stations.

During 2014, conductivity at SSTOU monitoring stations ranged from a low of 171 µS/cm in German Gulch at its mouth in Q2, to a high of 611 µS/cm in Silver Bow Creek below Browns Gulch in Q4. This range was similar to that observed in 2013 (173-635 µS/cm).

1.4.2.4 Dissolved Oxygen

Dissolved oxygen concentrations at the SSTOU monitoring stations during the four quarterly 2014 monitoring events ranged from a low of 7.03 mg/L in Silver Bow Creek at the Rocker station in Q3, to a high of 13.97 mg/L in Silver Bow Creek above Sand Creek in Q1 [Figure 1-10]. During most quarterly monitoring events, the lowest dissolved oxygen levels were observed at the two Silver Bow Creek stations downstream of the Butte WWTP outfall. Dissolved oxygen levels also had larger seasonal variations at stations below the Butte WWTP, particularly in the reach from just below the WWTP to the site in Reach L.

Dissolved oxygen (% saturation) showed supersaturated (>100%) conditions at two stations above and seven stations below the Butte WWTP outfall in 2014. These included Silver Bow Creek above the Butte Reduction Works and above the Butte WWTP in Q1 and Q2, below the Butte WWTP in Q2, above and below Sand Creek in Q1, Q2 and Q3, above Browns Gulch in Q2 and Q3, at the site in Reach L in Q1and Q2, at Miles Crossing in Q1, Q2 and Q3, and above German Gulch in Q2. The maximum dissolved oxygen saturation was 130.2% [Figure 1-11].

Dissolved oxygen concentrations showed similar variability in 2014 and 2013 but lowest values were somewhat lower in 2013 (range 6.50-15.10). The overall range of dissolved oxygen concentrations measured in 2012 was from 7.88 to 16.92 mg/L.

1.4.2.5 Turbidity

Turbidity levels at SSTOU monitoring stations were usually less than 10 NTU (Nephelometric Turbidity Units) during 2014 monitoring events (65 of 68 measurements). Turbidity was highest at 10 of 17 monitoring stations during spring runoff conditions in Q2 [Figure 1-12]. The second highest frequency of elevated turbidity was recorded during the Q4 monitoring event, when six of 17 stations showed highest turbidity readings. During Q4, turbidity was elevated at all Silver Bow Creek monitoring stations from above Sand Creek to Miles Crossing. Readings were particularly high at the Silver Bow Creek site in Reach L and at Miles Crossing (22.1 and 36.8 NTU, respectively), and represented the highest values recorded during the four 2014 monitoring events. German Gulch at its mouth had the lowest turbidity levels of all monitoring sites in 2014. Turbidity at SSTOU monitoring stations in 2014 showed a much greater range than in 2013 (high reading of 19 NTU) due to the high Q4 measurements in Silver Bow Creek in Reach L and at Miles Crossing.

1.4.2.6 Suspended Sediment

The highest total suspended sediment (TSS) concentrations recorded at individual monitoring stations in 2014 tended to occur in Q2 (9 of 17 stations) or Q4 (7 of 17 stations). Elevated total suspended sediment in Q2 was associated with spring snowmelt runoff

conditions. Elevated total suspended sediment in Q4 was restricted to a group of Silver Bow Creek monitoring sites extending from Rocker to Miles Crossing and may have been associated with melting stream bottom anchor ice and the associated mobilization of organic material and fine sediment from the stream bottom. Turbidity readings were similarly elevated at these sites.

The highest total suspended sediment concentrations measured in 2014 were 78 mg/L in Silver Bow Creek at Miles Crossing and 50 mg/L in Silver Bow Creek in Reach L during the Q4 monitoring event. In contrast, highest total suspended sediment concentrations measured during spring runoff conditions in Q2 were 24 mg/L in Silver Bow Creek at Miles Crossing, and 21 mg/L measured in Silver Bow Creek above the Butte WWTP and at Frontage Road. Blacktail Creek at Father Sheehan Park and German Gulch at its mouth had consistently low total suspended sediment concentrations which ranged from 1-8 mg/L [Figure 1-13].

Overall, 66 of 68 quarterly total suspended sediment measurements in 2014 were at or below 25 mg/L. Total suspended sediment concentrations exceeded 25 mg/L only at Silver Bow Creek stations at Miles Crossing and in Reach L, and only during the Q4 monitoring event. There was no readily apparent spatial trend for total suspended sediment concentrations in Silver Bow Creek during the 2014 monitoring events, except that total suspended sediment was usually somewhat lower downstream from the Butte WWTP outfall and downstream from German Gulch than at the immediate upstream sites. Total suspended sediment concentrations at SSTOU monitoring stations in 2014 were generally within the range of concentrations observed in 2013 and prior years.

In 2014, the highest total suspended sediment loads at most monitoring stations occurred during Q2 when streamflows were highest [Figure 1-14]. Exceptions to this pattern were sites on Silver Bow Creek at Miles Crossing and in Reach L where total suspended sediment loads were highest during the Q4 monitoring event. The largest site-to-site increases in total suspended sediment loads occurred between Silver Bow Creek below Browns Gulch and the site in Reach P during Q4 (2.73 tons/day), and from the site on Silver Bow Creek below Stewart Street at Opportunity to the Frontage Road site in Q2 (2.62 tons/day). The overall spatial trend for total suspended sediment loading in Silver Bow Creek was a gradual downstream increase that appeared to be related mostly to increasing streamflows. The highest total suspended sediment load was measured at the downstream-most station at Frontage Road in Q2, although the highest loads in Q1 and Q4 were measured well upstream at Miles Crossing [Figure 1-14].

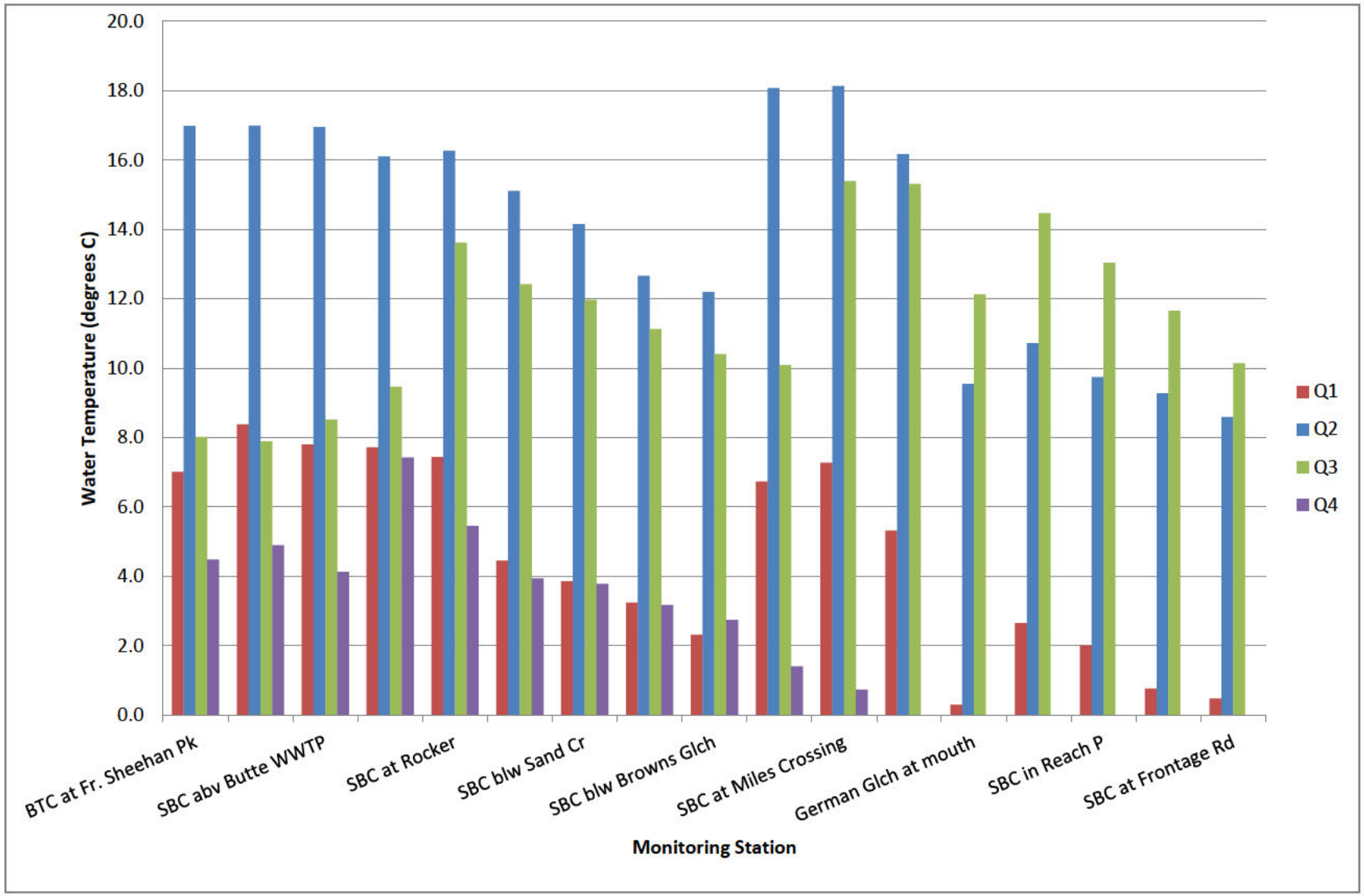

Figure 1-7. Surface water temperatures at Streamside Tailings Operable Unit monitoring stations, 2014.

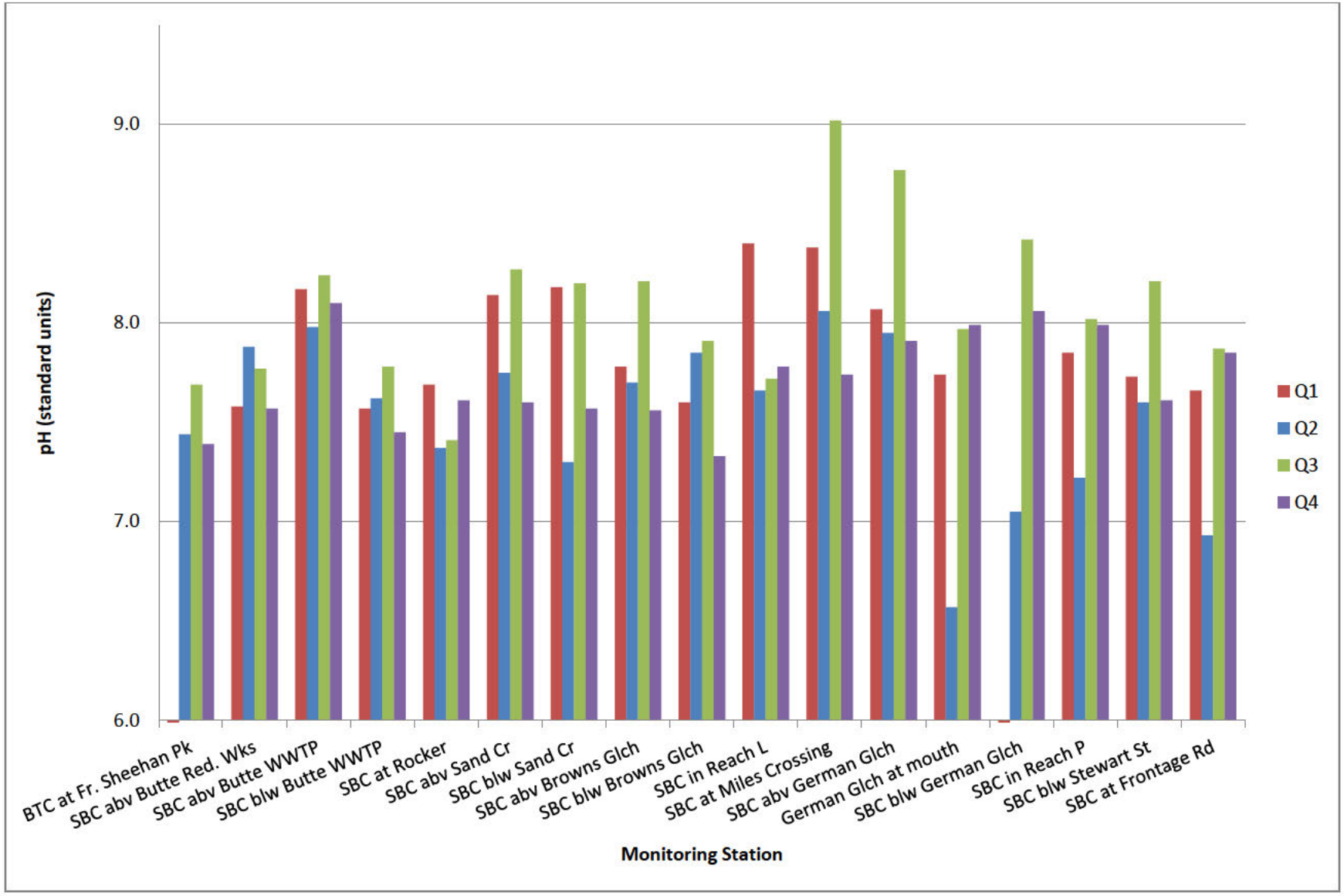

Figure 1-8. Surface water pH at Streamside Tailings Operable Unit monitoring stations, 2014.

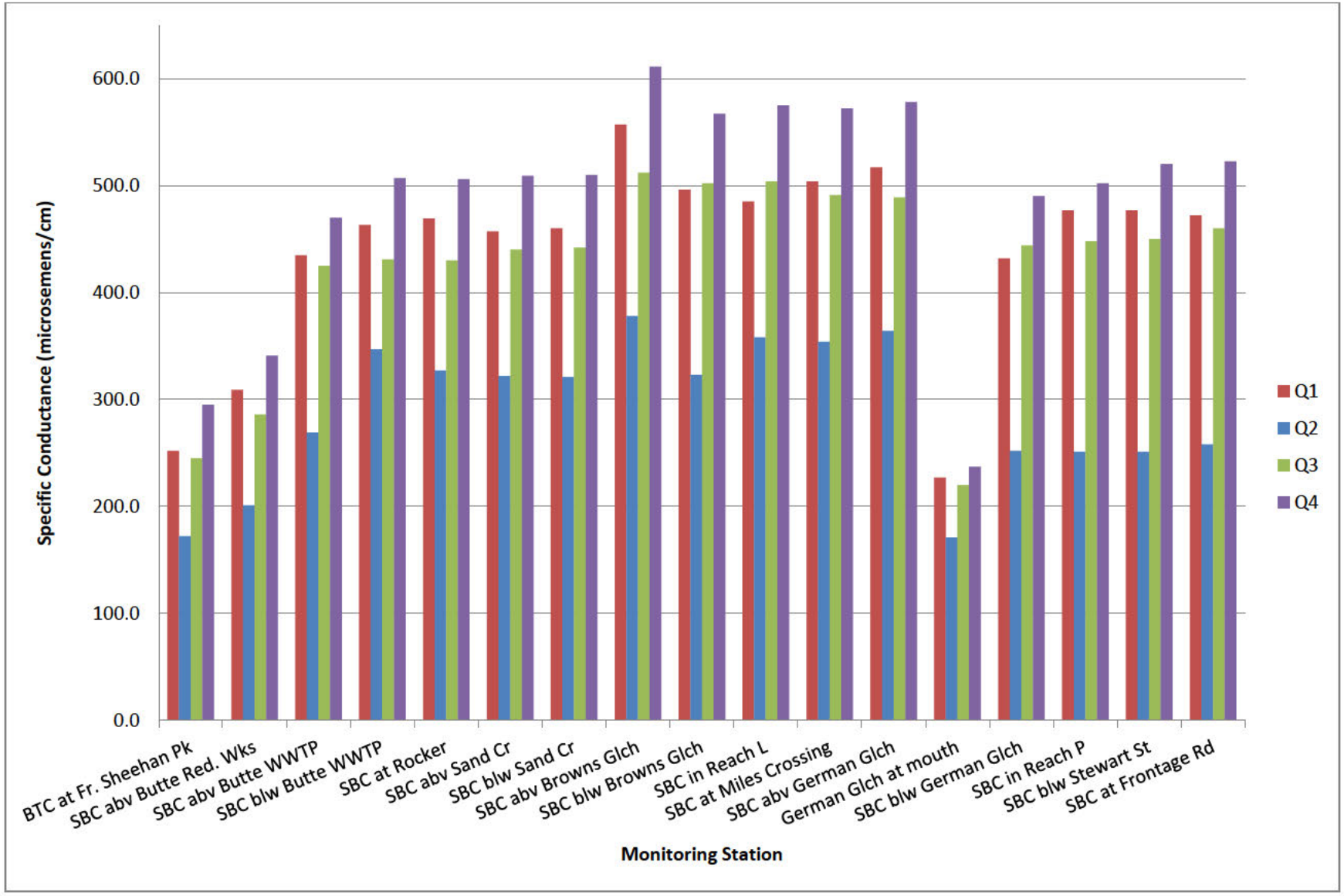

Figure 1-9. Conductivity at Streamside Tailings Operable Unit monitoring stations, 2014.

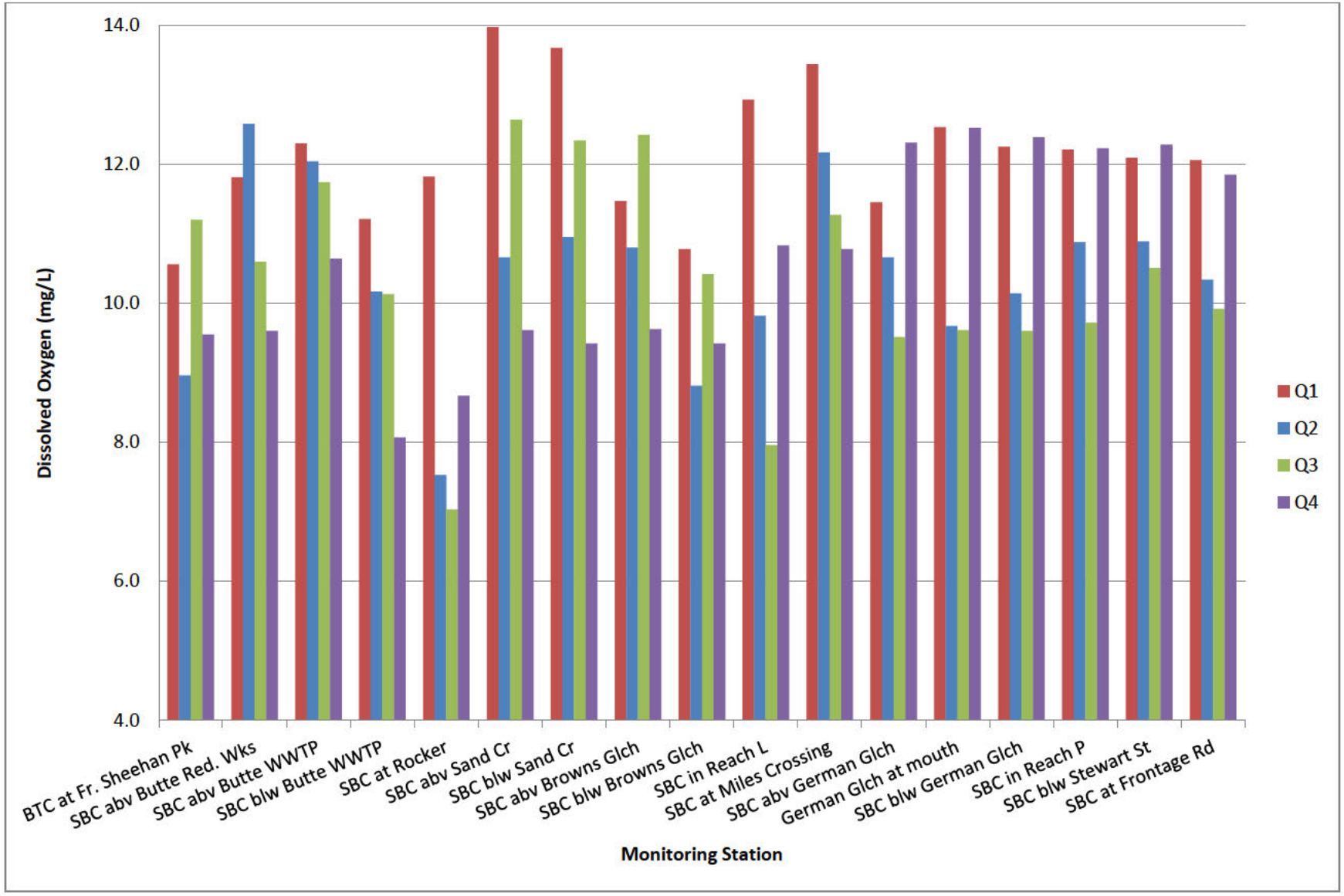

Figure 1-10. Dissolved oxygen concentrations at Streamside Tailings Operable Unit monitoring stations, 2014.

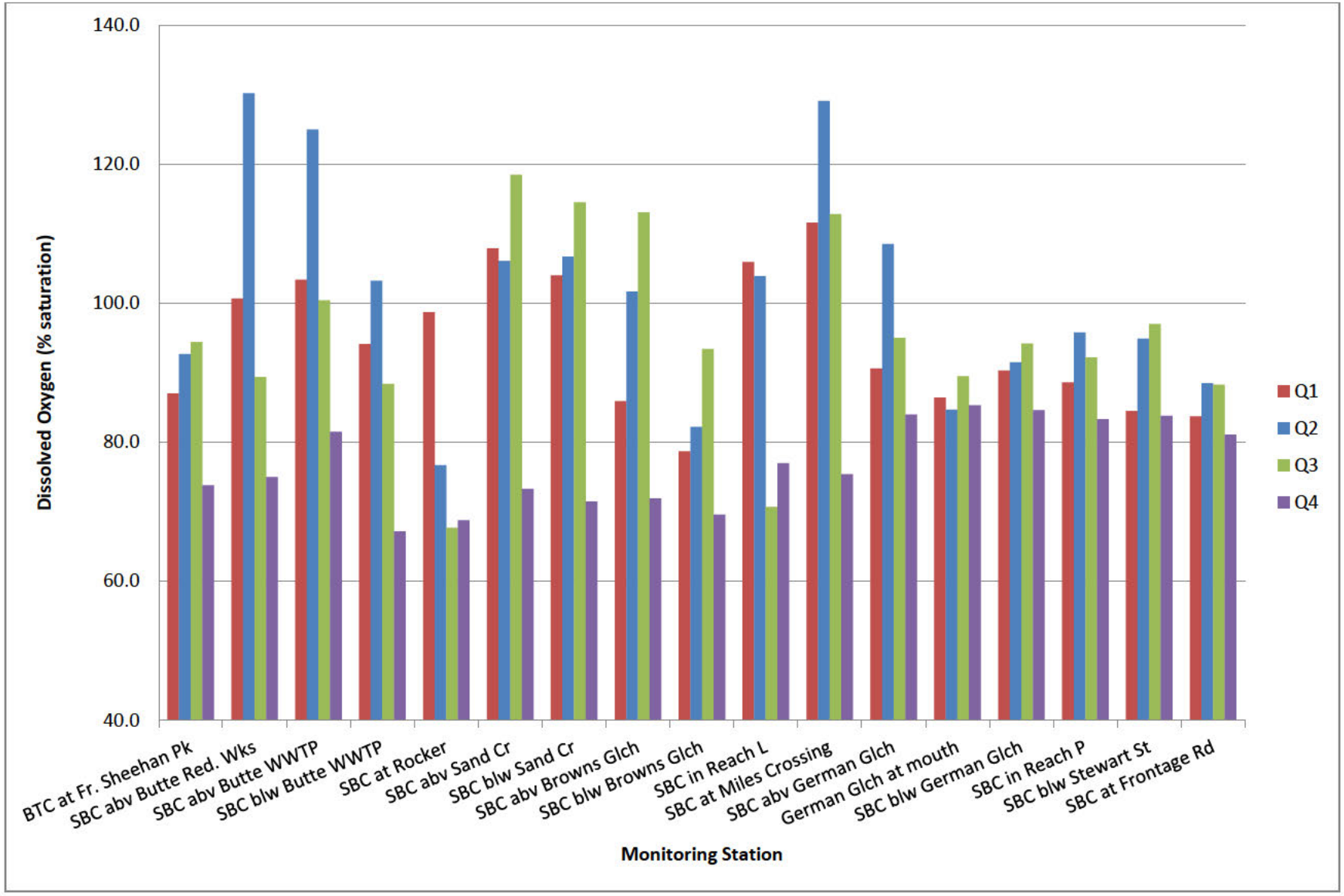

Figure 1-11. Dissolved oxygen saturation at Streamside Tailings Operable Unit monitoring stations, 2014.

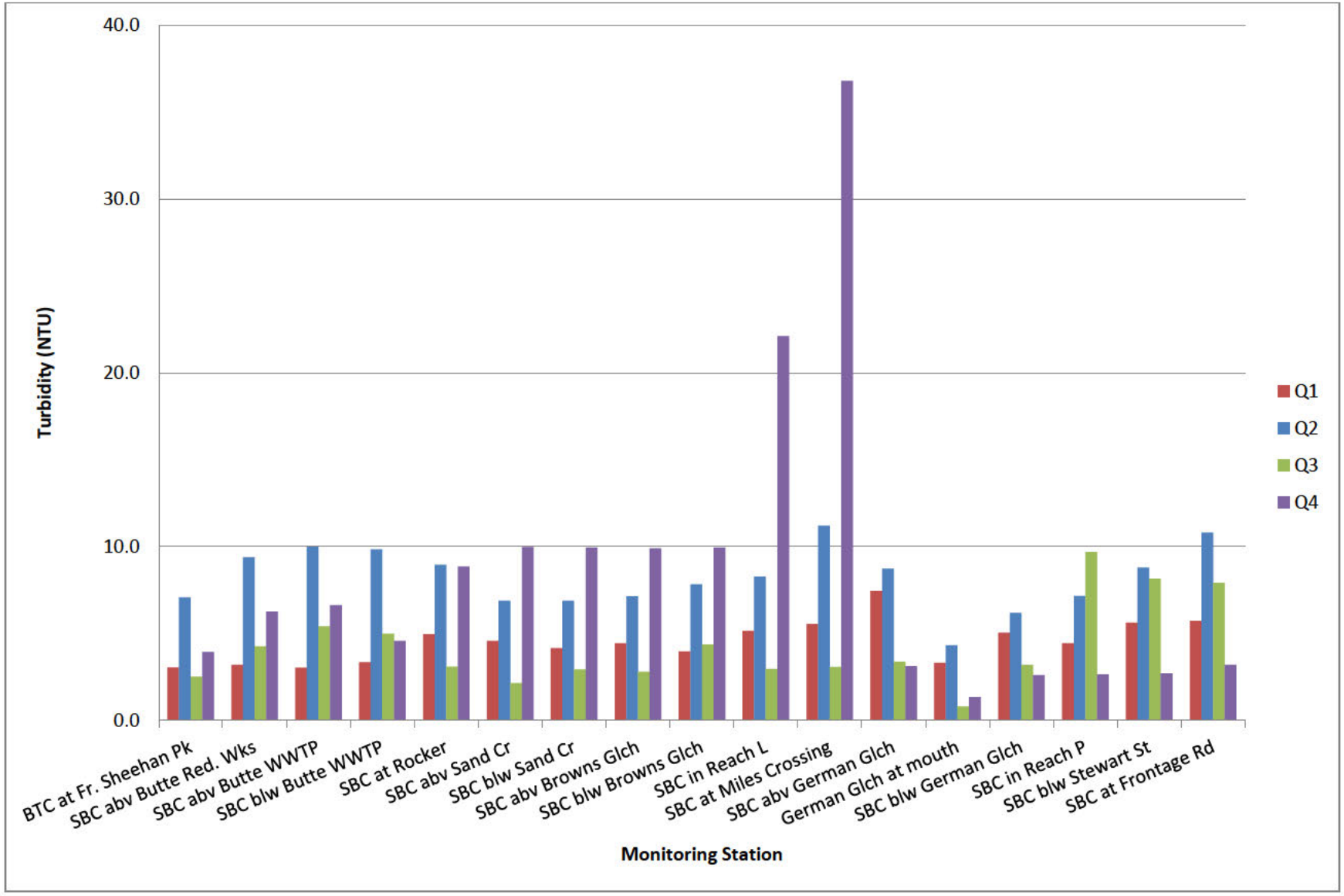

Figure 1-12. Turbidity at Streamside Tailings Operable Unit monitoring stations, 2014.

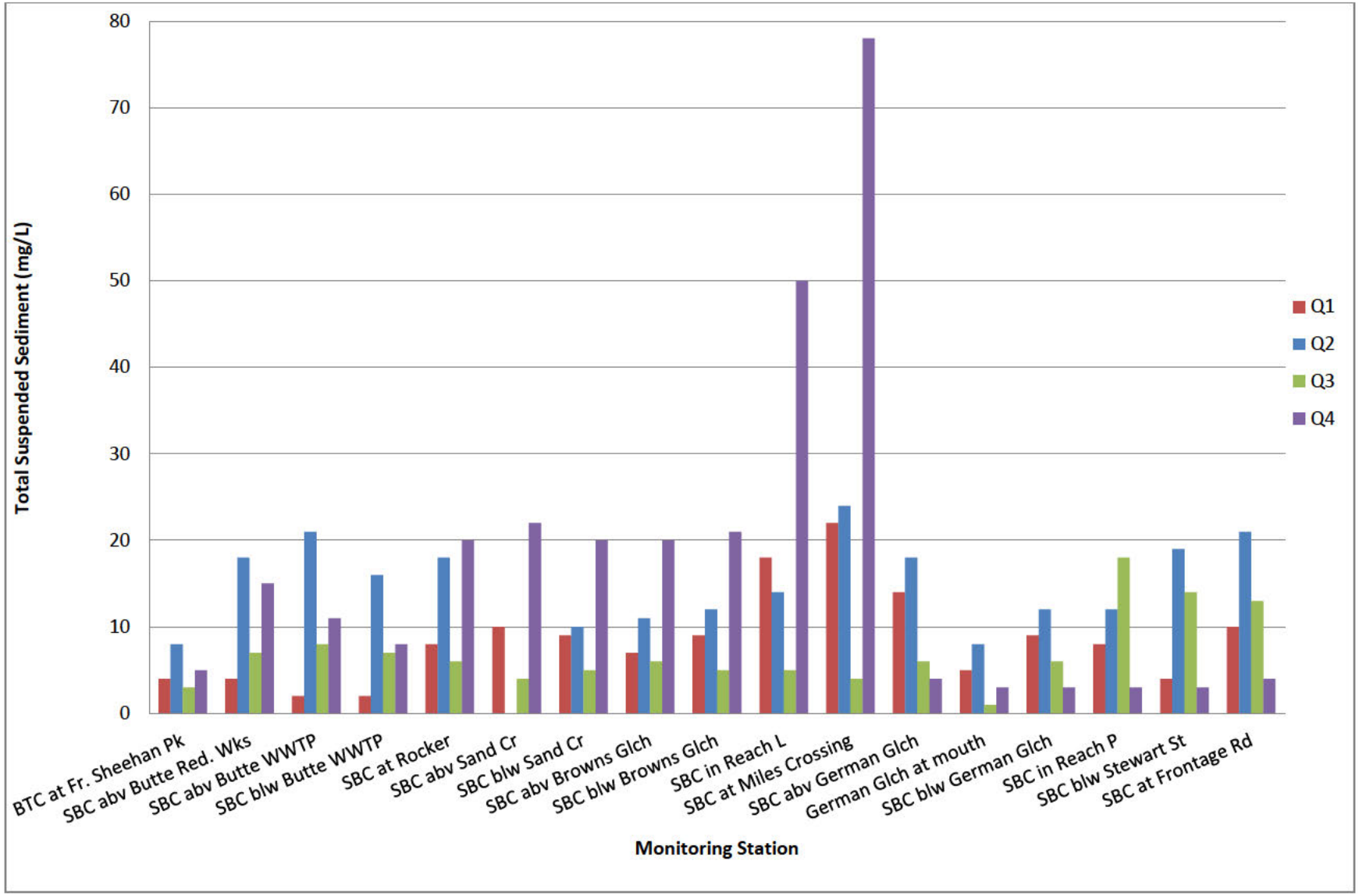

Figure 1-13. Total suspended sediment concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate values less than the analytical reporting level.

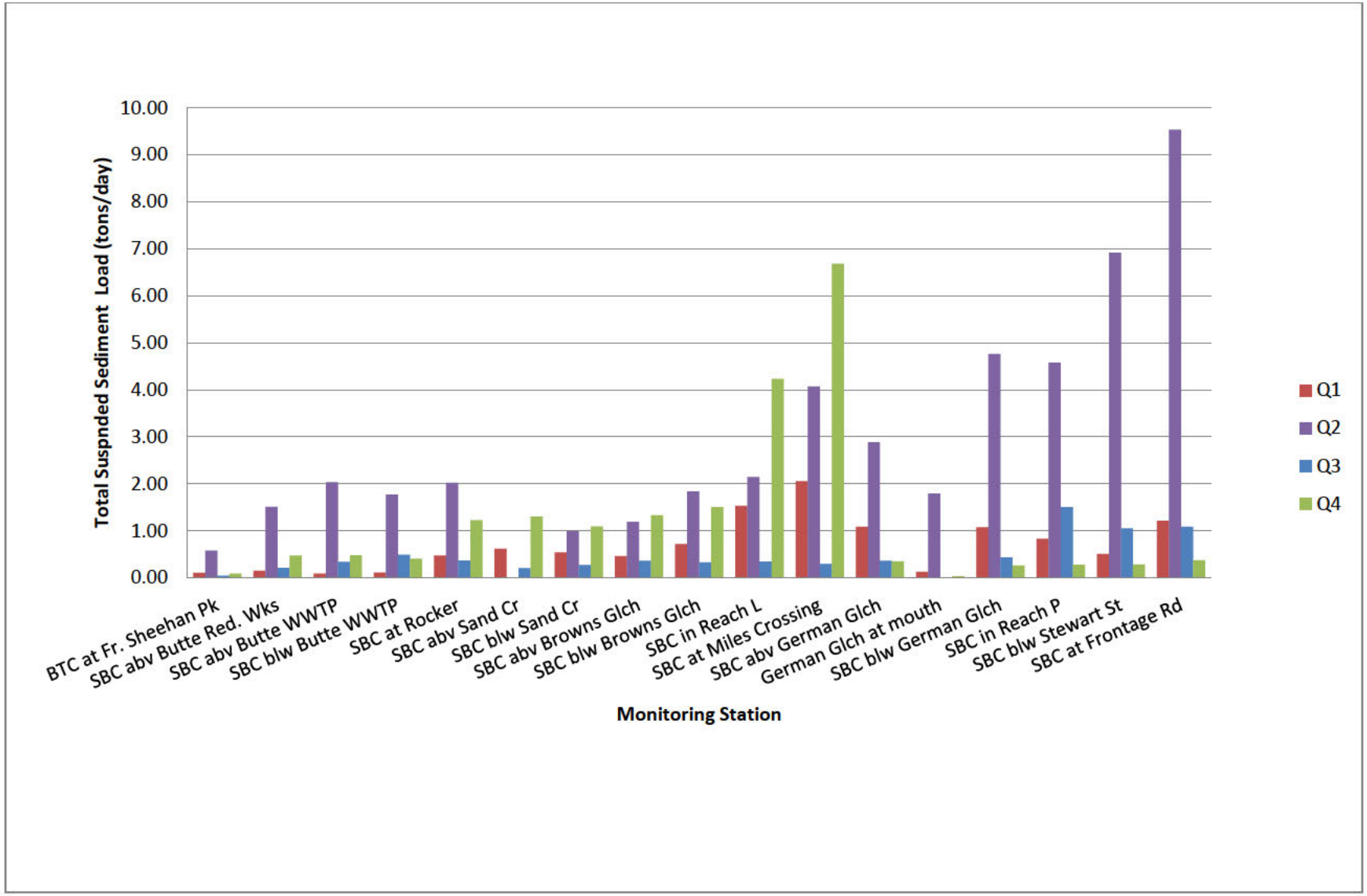

Figure 1-14. Total suspended sediment loads at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate values less than the analytical reporting level.

1.4.3 Common Ions

Figure 1-15 through Figure 1-20 depict 2014 quarterly monitoring results for water hardness, total and bicarbonate alkalinity, sodium, chloride and sulfate at the SSTOU network of monitoring stations. Potassium is not presented because it represented a small proportion of dissolved ions.

Calcium was the dominant cation (representing more than 50% of the total cation milliequivalents) at all of the SSTOU monitoring stations during monitoring in 2014. Levels of water hardness in Silver Bow Creek during 2014 can be described as ranging from hard to very hard, with concentrations at some sites falling into the moderately hard range during elevated streamflow conditions such as those that were encountered during the Q2 monitoring event [Figure 1-15]. Water hardness in Blacktail Creek and German Gulch was consistently lower than in Silver Bow Creek. Spatially, hardness increased in a downstream manner from Blacktail Creek at Father Sheehan Park to the Silver Bow Creek station above Browns Gulch, then stabilized downstream to above German Gulch. Hardness then decreased from above to below German Gulch, then remained stable at all downstream Silver Bow Creek monitoring sites. Water hardness at SSTOU monitoring stations during 2014 were very similar to values recorded in 2013.

Bicarbonate was the dominant anion at Blacktail Creek and German Gulch monitoring stations in 2014. All of the Silver Bow Creek monitoring stations were classified as either bicarbonate or bicarbonate-sulfate type waters, depending on the season and station, from the standpoint of anionic composition. There was little spatial variation between mainstem SSTOU stations in total and bicarbonate alkalinity. Tributary stations on Blacktail Creek and German Gulch had somewhat lower alkalinity than mainstem stations [Figure 1-16; Figure 1-17]. Total and bicarbonate alkalinity increased from above to below the Butte WWTP discharge

In 2014, sodium ion concentrations had the same spatial pattern as in 2010-2013. Sodium concentrations increased from the Blacktail Creek station downstream to the Browns Gulch area, then stabilized at Silver Bow Creek stations downstream to the German Gulch confluence. This trend was observed in all quarters, but was slightly less pronounced during runoff conditions in Q2. The highest overall sodium concentrations were observed in Silver Bow Creek from above Browns Gulch to above German Gulch. Sodium concentrations declined markedly in Silver Bow Creek from above to below the German Gulch inflow. In Q1, a small decline in sodium concentration was noted in Silver Bow Creek from Rocker to above Sand Creek. A similarly small decline was noted in Q2 in Silver Bow Creek from above to below Sand Creek. The largest upstream to downstream increases in sodium concentration in Silver Bow Creek were noted in the reach of Silver Bow Creek from below Sand Creek to above Browns Gulch.

Sodium concentrations in 2014 were similar to concentrations measured in 2010-2013. Sodium concentrations were generally similar at most stations during the lower streamflow conditions encountered during Q1, Q3 and Q4. Sodium concentrations were lowest during snowmelt runoff conditions in Q2 [Figure 1-18].

The spatial pattern of chloride concentrations was similar to the pattern of sodium concentrations. Chloride concentrations increased from the Blacktail Creek station downstream

to the above Browns Gulch station. Chloride concentrations declined somewhat downstream from Browns Gulch, then stabilized at Silver Bow Creek stations from below Browns Gulch downstream to German Gulch. Like the spatial trend for sodium, low chloride concentrations in German Gulch diluted chloride concentrations in Silver Bow Creek below its confluence accounting for much lower chloride concentrations at downstream Silver Bow Creek monitoring stations [Figure 1-19].

Chloride concentrations were lowest during snowmelt runoff conditions in Q2, ranging from less than the analytical reporting level in German Gulch to 26 mg/L in Silver Bow Creek above Browns Gulch. The highest chloride concentrations during 2014 were observed in Q1 when streamflows were quite low, with concentrations ranging from 2 mg/L in German Gulch to a high of 63 mg/L in Silver Bow Creek above Browns Gulch. Consistent increases in chloride concentrations were noted in Silver Bow Creek from above to below the Butte WWTP outfall. The largest increases in chloride concentrations in Silver Bow Creek were noted from below Sand Creek to above Browns Gulch during all four 2014 quarterly monitoring events. Chloride concentrations in 2014 were within the range of concentrations measured during 2010-2013.

Sulfate concentrations increased several fold in Silver Bow Creek from above the Butte Reduction Works to the station above the Butte WWTP, increased at a lower rate downstream to the above Browns Gulch station, and then stabilized in the segment of Silver Bow Creek extending downstream to the German Gulch confluence [Figure 1-20]. Like the other common ions, sulfate concentrations fell markedly in Silver Bow Creek below German Gulch due to dilution then stabilized or increase only subtly from below German Gulch to the Frontage Road station. Spatial increases in sulfate concentration in Silver Bow Creek were greatest in Q3 and Q4 of 2014, and were generally smallest during snowmelt runoff in in Q2. Sulfate was the second most prevalent anion at SSTOU monitoring stations behind bicarbonate. Sulfate ion concentrations measured in 2014 were within the range observed in 2010-2013.

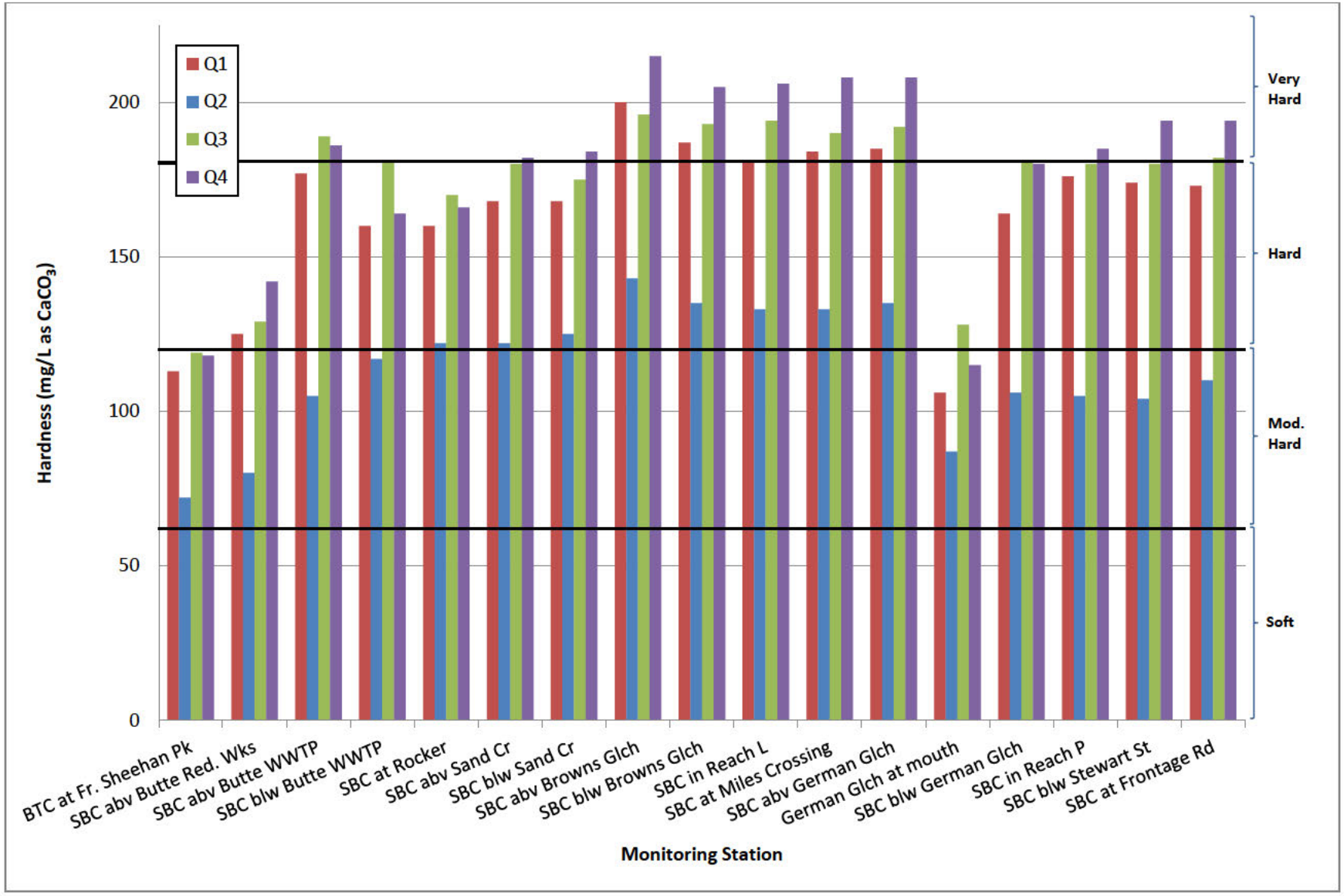

Figure 1-15. Water hardness at Streamside Tailings Operable Unit monitoring stations, 2014.

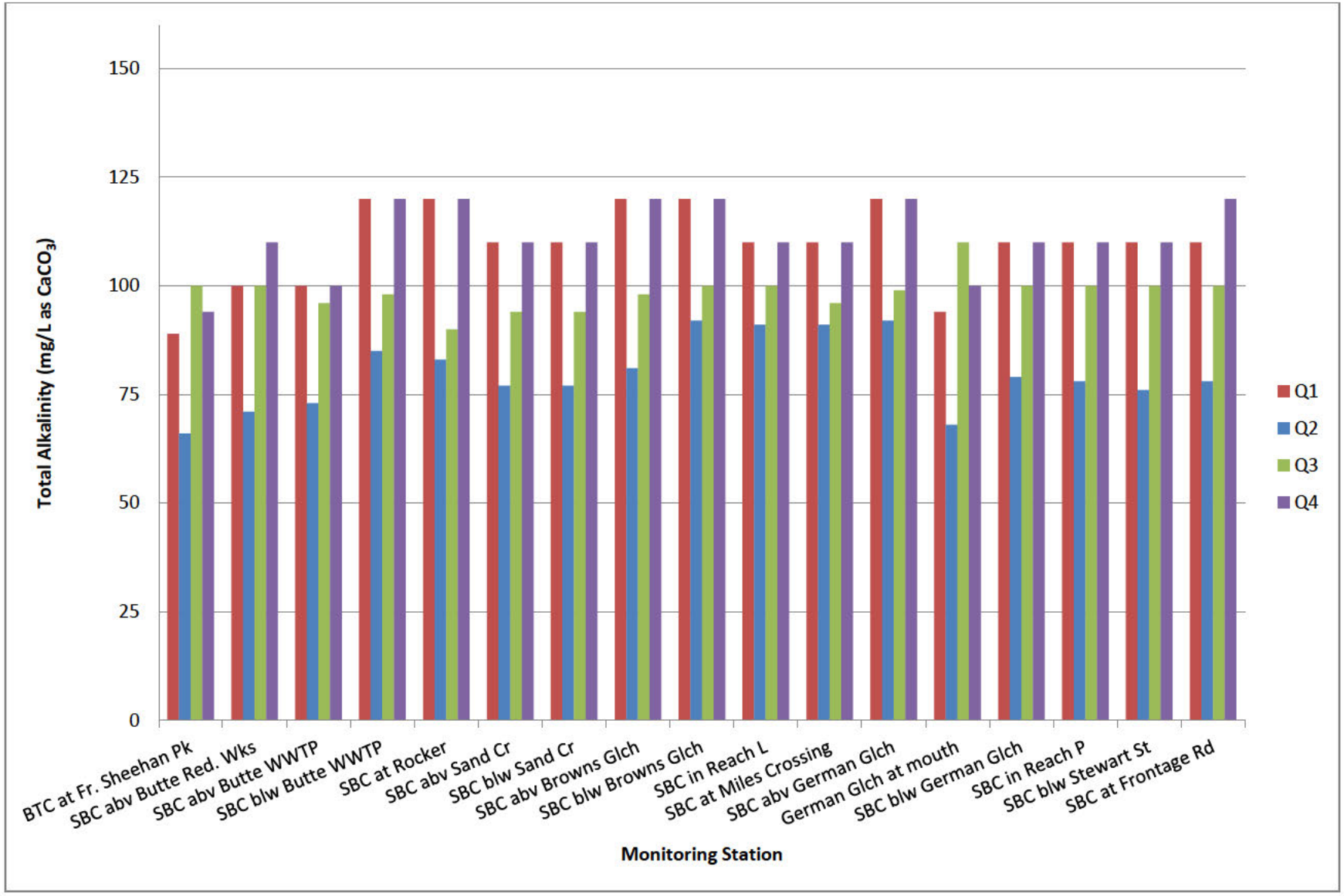

Figure 1-16. Total alkalinity at Streamside Tailings Operable Unit monitoring stations, 2014.

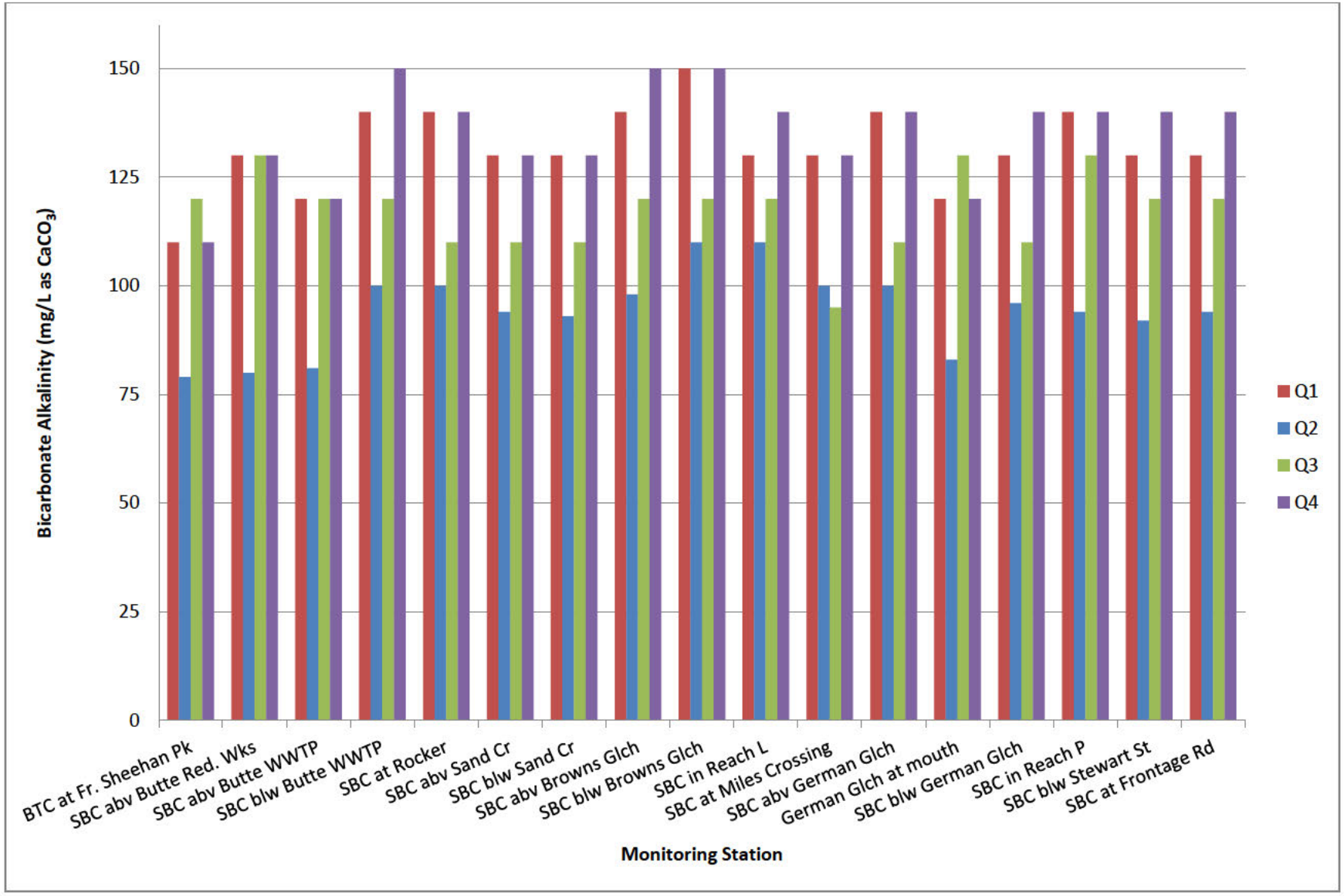

Figure 1-17. Bicarbonate alkalinity at Streamside Tailings Operable Unit monitoring stations, 2014.

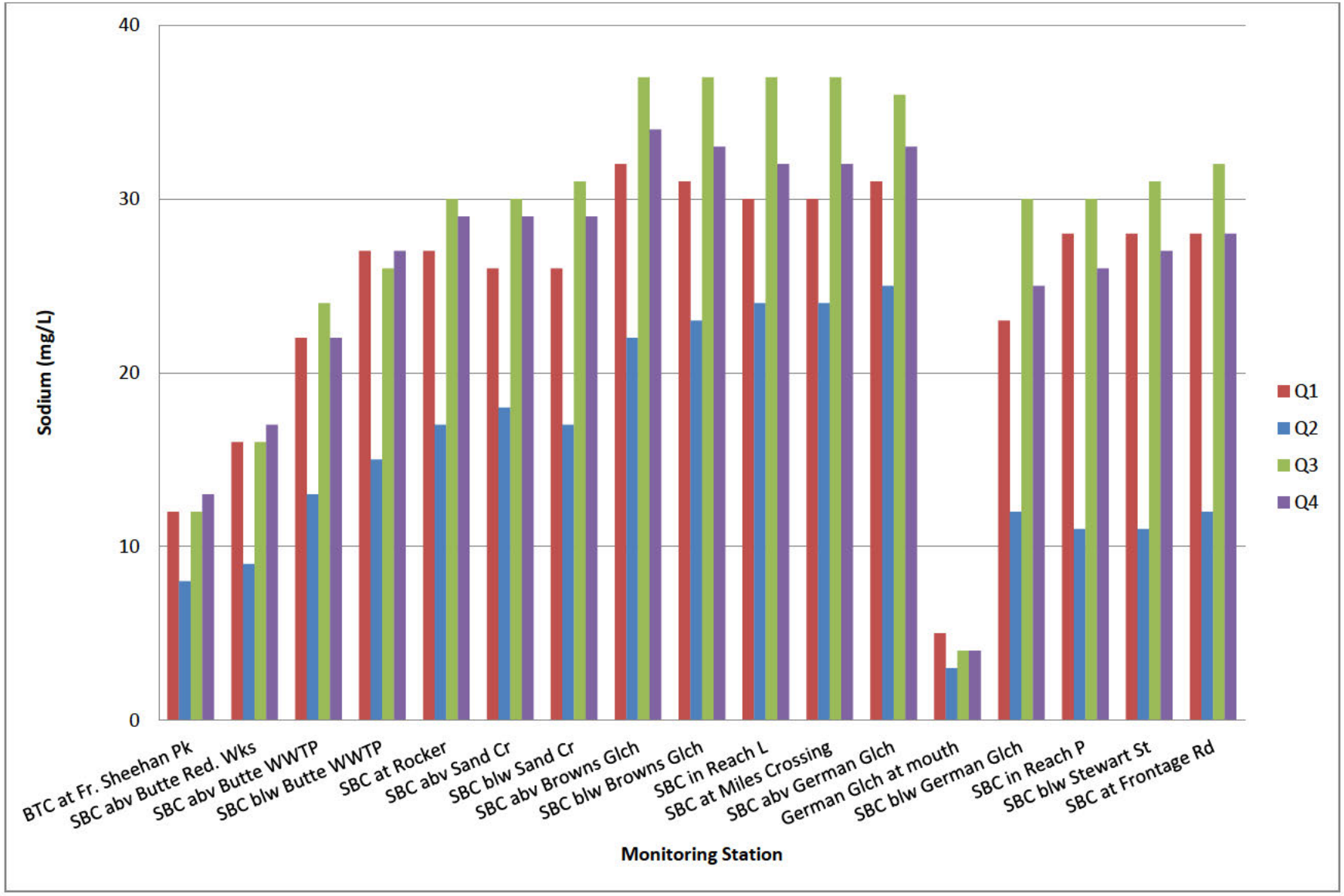

Figure 1-18. Sodium concentrations at Streamside Tailings Operable Unit monitoring stations, 2014.

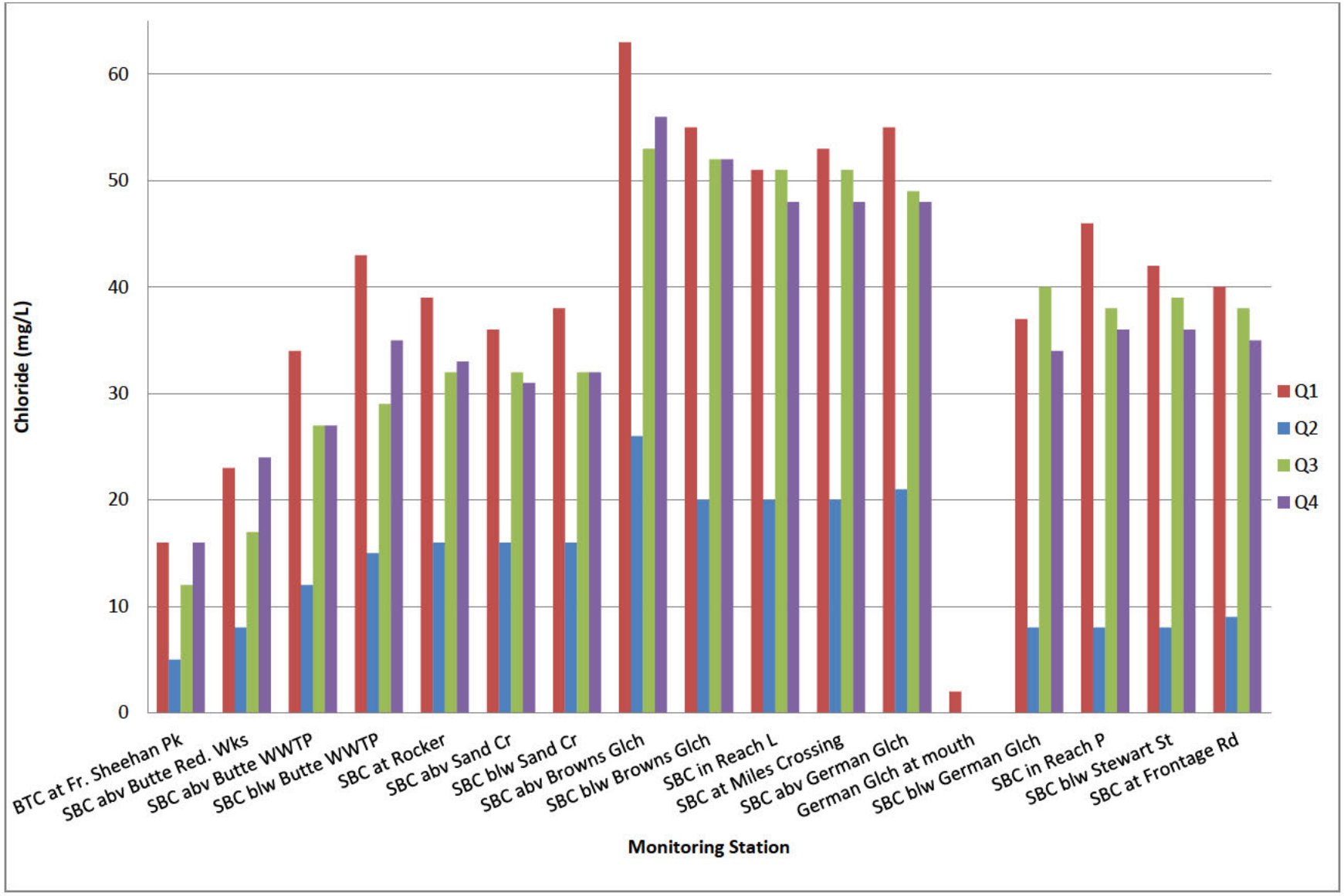

Figure 1-19. Chloride concentrations at Streamside Tailings Operable Unit monitoring stations, 2014.

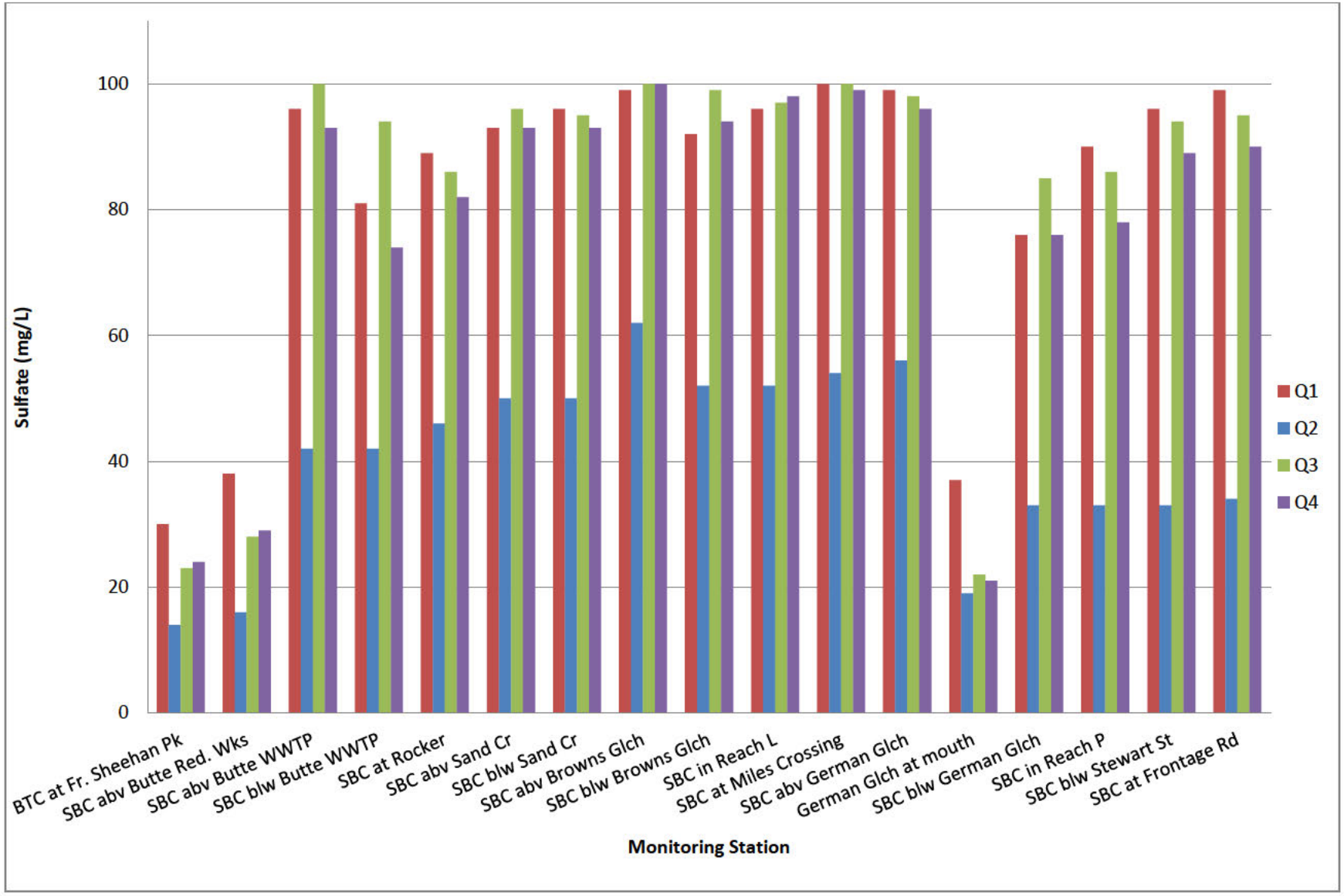

Figure 1-20. Sulfate concentrations at Streamside Tailings Operable Unit monitoring stations, 2014.

1.4.4 Nutrients

1.4.4.1 Total Nitrogen

Concentrations of total nitrogen were high throughout Silver Bow Creek, particularly at monitoring stations located downstream from the Butte WWTP outfall [Figure 1-21]. Total nitrogen concentrations typically increased abruptly from above to below the Butte WWTP, and then declined with distance downstream from the WWTP. This spatial pattern was apparent during the Q1, Q2 and Q4 2014 monitoring events, but not during Q3. In Q3, total nitrogen concentrations in Silver Bow Creek increased markedly from above to below German Gulch, and these high concentrations persisted at subsequent sites extending downstream to the lower-most site at Frontage Road.

Lowest total nitrogen concentrations at most of the monitoring stations were observed during the Q2 spring runoff monitoring event when streamflows were highest [Table 1-7]. Highest total nitrogen concentrations were observed during base streamflow conditions and cooler ambient temperatures in Q4 (9 of 17 sites) or Q3 (7 of 217 sites). Concentrations of total nitrogen exceeded the applicable standard [MDEQ, 2014b] at all Blacktail Creek and Silver Bow Creek monitoring stations during all quarters, including those stations upstream from the WWTP outfall. However, the MDEQ [2014b] standards only apply to the July 1 to September 30 period of the year which encompasses the Q3 monitoring event only. Concentrations of total nitrogen in German Gulch were lower than the MDEQ [2014b] standard during three of four quarterly monitoring events, but slightly exceeded the standard in Q3. Elevated levels of total nitrogen observed in 2014 were consistent with total nitrogen levels observed in 2010-2013.

Most of the total nitrogen loading to Silver Bow Creek occurred in the reach from above to below the Butte WWTP [Figure 1-22]. Large increases in total nitrogen loads were noted at lower Silver Bow Creek monitoring stations below German Gulch in Q3, in relation to the previously described increases in total nitrogen concentrations at those sites. Increased loads were also noted in Q2 at the downstream sites during spring snowmelt runoff conditions and higher streamflows at those sites. Additional smaller increases in total nitrogen loading were apparent within the reach of Silver Bow Creek between Blacktail Creek and the station above the Butte WWTP (all quarters). Total nitrogen loading patterns in Silver Bow Creek in 2014 were comparable to those seen in 2010-2013, including the pattern of loading that was likely attributable to the WWTP discharge. However, the increased total nitrogen concentrations and loads at the downstream Silver Bow Creek stations in Q3 have not been previously observed.

Table 1-7. Total nitrogen concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	1.18	0.50	0.92	1.29
SS-05A	Silver Bow Creek above Butte Reduction Works	1.29	0.73	1.86	1.57
SS-06G	Silver Bow Creek above WWTP	1.42	0.85	1.98	1.66
SS-07	Silver Bow Creek below WWTP	8.10	4.30	3.38	8.60
SS-08	Silver Bow Creek at Rocker	7.40	5.10	7.00	7.00
SS-10A	Silver Bow Creek above Sand Creek	3.98	3.23	3.10	4.80
SS-10B	Silver Bow Creek below Sand Creek	3.81	2.96	3.56	4.80
SS-11C	Silver Bow Creek above Browns Gulch	2.15	2.50	3.73	6.00
SS-11D	Silver Bow Creek below Browns Gulch	3.87	2.41	3.51	5.20
SS-13	Silver Bow Creek in Reach L	2.74	1.12	3.51	4.60
SS-14	Silver Bow Creek at Miles Crossing	2.95	0.88	2.76	4.50
SS-15A	Silver Bow Creek above German Gulch	3.57	0.78	1.53	5.20
SS-15G	German Gulch near confluence	0.17	0.22	0.51	ND
SS-15B	Silver Bow Creek below German Gulch	2.55	0.35	6.50	3.70
SS-16	Silver Bow Creek in Reach P near Fairmont	2.94	0.90	6.40	3.70
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	2.21	0.89	5.30	3.10
SS-19	Silver Bow Creek at Frontage Road	2.04	0.98	5.40	2.87

Exceeds the summertime base numeric nutrient standard for total nitrogen [MDEQ, 2014b].

1.4.4.2 Nitrate Plus Nitrite Nitrogen

Concentrations of nitrate plus nitrite nitrogen were also elevated during the 2014 monitoring year and followed a similar spatial pattern to total nitrogen. Nitrate plus nitrite nitrogen concentrations tended to be high in the upstream Silver Bow Creek stations, but increased markedly at several stations below the Butte WWTP discharge. Nitrate plus nitrite nitrogen concentrations declined below the German Gulch inflow then remained similar downstream to the Frontage Road monitoring site [Figure 1-23]. The highest nitrate plus nitrite nitrogen concentrations at the stations located below the WWTP discharge were almost always observed during the lowest streamflows in Q3 [Table 1-8]. Concentrations at stations above the WWTP were highest in Q4. Nitrate plus nitrite concentrations at most of the monitoring stations were lowest in Q2 when streamflows were highest. Nitrate plus nitrite nitrogen concentrations in German Gulch at its mouth were consistently low, and much lower than at all of the Silver Bow Creek and Blacktail Creek monitoring sites. Spatial patterns in nitrate plus nitrite nitrogen concentrations in 2014 were similar to those observed in 2010-2013, although peak concentrations in 2014 were somewhat lower than those observed in the previous year.

Table 1-8. Nitrate plus nitrite nitrogen concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.79	0.12	0.98	1.20
SS-05A	Silver Bow Creek above Butte Reduction Works	0.93	0.15	1.02	1.26
SS-06G	Silver Bow Creek above WWTP	1.06	0.24	1.13	1.54
SS-07	Silver Bow Creek below WWTP	0.84	0.29	1.68	1.31
SS-08	Silver Bow Creek at Rocker	1.25	1.10	3.93	1.72
SS-10A	Silver Bow Creek above Sand Creek	1.49	1.54	2.94	2.29
SS-10B	Silver Bow Creek below Sand Creek	1.47	1.46	2.92	2.11
SS-11C	Silver Bow Creek above Browns Gulch	1.29	1.47	2.93	1.81
SS-11D	Silver Bow Creek below Browns Gulch	1.21	1.09	2.71	1.73
SS-13	Silver Bow Creek in Reach L	1.33	1.37	2.76	1.69
SS-14	Silver Bow Creek at Miles Crossing	1.30	1.02	2.06	1.61
SS-15A	Silver Bow Creek above German Gulch	1.31	0.85	2.41	1.79
SS-15G	German Gulch near confluence	0.08	ND	ND	0.11
SS-15B	Silver Bow Creek below German Gulch	0.94	0.38	2.13	1.36
SS-16	Silver Bow Creek in Reach P near Fairmont	1.30	0.39	2.04	1.48
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	1.28	0.40	1.36	1.43
SS-19	Silver Bow Creek at Frontage Road	1.21	0.46	1.69	1.38

ND Not detected at analytical reporting limit.

1.4.4.3 Total Ammonia

Ammonia nitrogen concentrations were consistently elevated at many of the stations downstream from the Butte WWTP discharge during each quarterly monitoring event in 2014 [Figure 1-26]. The highest concentrations of total ammonia at stations below the WWTP were observed in Q1 and Q4 when streamflows were relatively low and water temperatures were cold. Lower total ammonia concentrations were observed in Q2 when streamflows were elevated contributing to greater dilution of the WWTP effluent, and in Q3 when water temperatures were highest and nitrification rates were likely to be greater. This same pattern was observed in the 2013 monitoring year. Ammonia concentrations declined rapidly a short distance downstream from the Butte WWTP in Q3, and were not detectable in the segment of Silver Bow Creek from above Sand Creek downstream to the Frontage Road site during that monitoring event. During the high streamflow Q2 monitoring event when instream dilution of the WWTP effluent was greatest, ammonia nitrogen was not detected at Silver Bow Creek sites extending from Miles Crossing downstream to the Frontage Road site. Ammonia nitrogen was not detectable at any of the three SSTOU monitoring stations located upstream from the Butte WWTP, or in German Gulch, during any the four quarterly 2014 monitoring events.

In 2014, total ammonia concentrations exceeded the pH- and temperature-dependent chronic ALS for early life stages of salmonids at the station immediately below the Butte WWTP discharge and at Rocker in Q1 and Q4 and above German Gulch in Q4 [Table 1-8; Table 1-9]. No exceedances of the higher acute ALS for ammonia were documented at any of the monitoring stations during any of the four quarterly monitoring events in 2014. Overall, the frequency of excursions of the chronic and acute ALS for ammonia in Silver Bow Creek in 2014 were less than what was documented in 2013 (10 exceedances of the chronic ALS, 1 exceedance of the acute ALS) but similar to 2012 (5 chronic ALS exceedances, no acute ALS exceedances).

Table 1-9. Ammonia toxicity for samples from the Streamside Tailings Operable Unit, 2014. Aquatic life standards are dependent on pH and water temperature at the time samples are collected [MDEQ, 2012a].

Site ID	Station	Sample Quarter	Temp (C)	pH	Aquatic Life Standard (mg/L)		Ammonia (mg/L)
					Chronic	Acute	
SS-01	Blacktail Creek at Father Sheehan Park	Q1	7.0	---	---	---	ND
		Q2	17.0	7.44	3.89	14.50	ND
		Q3	8.0	7.69	3.56	9.81	ND
		Q4	4.5	7.39	4.73	15.55	ND
SS-05A	Silver Bow Creek above Butte Reduction Works	Q1	8.4	7.58	4.01	11.74	ND
		Q2	17.0	7.88	2.40	7.02	ND
		Q3	7.9	7.77	3.24	8.55	ND
		Q4	4.9	7.57	4.05	11.93	ND
SS-06G	Silver Bow Creek above WWTP	Q1	7.8	8.17	1.80	4.05	ND
		Q2	17.0	7.98	2.09	5.83	ND
		Q3	8.5	8.24	1.60	3.54	ND
		Q4	4.1	8.10	2.02	4.64	ND
SS-07	Silver Bow Creek below WWTP	Q1	7.7	7.57	4.05	11.93	6.20
		Q2	16.1	7.62	3.48	11.01	3.00
		Q3	9.5	7.78	3.20	8.40	0.83
		Q4	7.4	7.45	4.51	14.30	7.00
SS-08	Silver Bow Creek at Rocker	Q1	7.4	7.69	3.56	9.81	3.90
		Q2	16.3	7.37	4.29	15.98	2.60
		Q3	13.6	7.41	4.66	15.13	0.13
		Q4	5.5	7.61	3.89	11.19	5.00
SS-10A	Silver Bow Creek above Sand Creek	Q1	4.5	8.14	1.89	4.30	1.62
		Q2	15.1	7.75	3.20	8.85	0.69
		Q3	12.4	8.27	1.52	3.34	ND
		Q4	3.9	7.60	3.93	11.37	1.69
SS-10B	Silver Bow Creek below Sand Creek	Q1	3.9	8.18	1.77	3.98	1.64
		Q2	14.2	7.30	5.05	17.51	0.54
		Q3	12.0	8.20	1.71	3.83	ND
		Q4	3.8	7.57	4.05	11.93	1.88

SS-11C	Silver Bow Creek above Browns Gulch	Q1	3.2	7.78	3.20	8.40	2.10
		Q2	12.7	7.70	3.52	9.64	0.63
		Q3	11.1	8.21	1.68	3.75	ND
		Q4	3.2	7.56	4.09	12.12	3.50
SS-11D	Silver Bow Creek below Browns Gulch	Q1	2.3	7.60	3.93	11.37	2.10
		Q2	12.2	7.85	2.92	7.41	0.56
		Q3	10.4	7.91	2.69	6.64	ND
		Q4	2.7	7.33	4.94	16.85	3.20
SS-13	Silver Bow Creek in Reach L	Q1	6.7	8.40	1.20	2.59	0.80
		Q2	18.1	7.66	2.94	10.31	0.12
		Q3	10.1	7.72	3.44	9.32	ND
		Q4	1.4	7.78	3.20	8.40	1.45
SS-14	Silver Bow Creek at Miles Crossing	Q1	7.3	8.38	1.25	2.70	0.96
		Q2	18.1	8.06	1.71	5.01	ND
		Q3	15.4	9.02	0.35	0.86	ND
		Q4	0.7	7.74	3.36	9.01	1.52
SS-15A	Silver Bow Creek above German Gulch	Q1	5.3	8.07	2.12	4.92	1.44
		Q2	16.2	7.95	2.29	6.17	ND
		Q3	15.3	8.77	0.57	1.30	ND
		Q4	0.0	7.91	2.69	6.64	2.70
SS-15G	German Gulch near confluence	Q1	0.3	7.74	3.36	9.01	ND
		Q2	9.6	6.57	6.59	31.70	ND
		Q3	12.1	7.97	2.47	5.94	ND
		Q4	0.0	7.99	2.40	5.72	ND
SS-15B	Silver Bow Creek below German Gulch	Q1	2.7	---	---	---	1.00
		Q2	10.7	7.05	5.77	23.03	ND
		Q3	14.5	8.42	1.16	2.49	ND
		Q4	0.0	8.06	2.15	5.01	1.60
SS-16	Silver Bow Creek in Reach P near Fairmont	Q1	2.0	7.85	2.92	7.41	0.99
		Q2	9.7	7.22	5.30	19.28	ND
		Q3	13.0	8.02	2.29	5.41	ND
		Q4	0.0	7.99	2.40	5.72	1.32
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	Q1	0.8	7.73	3.40	9.16	0.33
		Q2	9.3	7.60	3.93	11.37	ND
		Q3	11.7	8.21	1.68	3.75	ND
		Q4	0.0	7.61	3.89	11.19	1.03
SS-19	Silver Bow Creek at Frontage Road	Q1	0.5	7.66	3.69	10.31	0.34
		Q2	8.6	6.93	6.04	25.55	ND
		Q3	10.1	7.87	2.85	7.15	ND
		Q4	0.0	7.85	2.92	7.41	0.96

ND Not detected at analytical reporting limit.

Exceeds chronic aquatic life standard [MDEQ, 2012a].

Table 1-10. Total ammonia concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	ND	ND	ND	ND
SS-05A	Silver Bow Creek above Butte Reduction Works	ND	ND	ND	ND
SS-06G	Silver Bow Creek above WWTP	ND	ND	ND	ND
SS-07	Silver Bow Creek below WWTP	6.20	3.00	0.83	7.00
SS-08	Silver Bow Creek at Rocker	3.90	2.60	0.13	5.00
SS-10A	Silver Bow Creek above Sand Creek	1.62	0.69	ND	1.69
SS-10B	Silver Bow Creek below Sand Creek	1.64	0.54	ND	1.88
SS-11C	Silver Bow Creek above Browns Gulch	2.10	0.63	ND	3.50
SS-11D	Silver Bow Creek below Browns Gulch	2.10	0.56	ND	3.20
SS-13	Silver Bow Creek in Reach L	0.80	0.12	ND	1.45
SS-14	Silver Bow Creek at Miles Crossing	0.96	ND	ND	1.52
SS-15A	Silver Bow Creek above German Gulch	1.44	ND	ND	2.70
SS-15G	German Gulch near confluence	ND	ND	ND	ND
SS-15B	Silver Bow Creek below German Gulch	1.00	ND	ND	1.60
SS-16	Silver Bow Creek in Reach P near Fairmont	0.99	ND	ND	1.32
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.33	ND	ND	1.03
SS-19	Silver Bow Creek at Frontage Road	0.34	ND	ND	0.96

ND Not detected at analytical reporting limit.

Exceeds chronic aquatic life standard [MDEQ, 2012a].

1.4.4.4 Total Phosphorus

Total phosphorus concentrations in Silver Bow Creek were strongly tied to the Butte WWTP discharge, similar to the nitrogen variables. Total phosphorus concentrations in Silver Bow Creek increased from four- to nearly ten-fold from above to immediately below the outfall [Figure 1-24]. Peak total phosphorus concentrations during 2014 were observed in Silver Bow Creek from below the Butte WWTP outfall to above German Gulch, while concentrations were consistently lower in Silver Bow Creek downstream from the German Gulch confluence. German Gulch has had consistently low total phosphorus concentrations each year from 2010-2014.

The highest total phosphorus concentrations at most stations (10 of 17 sites) in 2014 were observed in Q4. The lowest concentrations at most stations (11 of 17 sites) were observed in Q3. Total phosphorus concentrations at most SSTOU monitoring stations during 2014 consistently exceeded the MDEQ standard (0.030 mg/L) [Table 1-11]. Exceptions were German Gulch at its mouth. The spatial and temporal trends for total phosphorus at SSTOU monitoring stations in

2014, and the frequency of exceedances of the MDEQ [2014b] standards, followed similar patterns to those observed in 2010-2013.

Load estimates for total phosphorus [Figure 1-25] indicated large-scale increases in total phosphorus loading in Silver Bow Creek from above to below the Butte-Silver Bow WWTP. Total phosphorus loads then tended to stabilize, with usually minor site-to-site variability, at Silver Bow Creek sites from below the WWTP discharge downstream to Frontage Road. One exception was in Q4 which showed the highest loads at the sites in Reach L and at Miles Crossing. During the spring snowmelt runoff monitoring event in Q2, peak loads of total phosphorus were recorded at the downstream-most site on Silver Bow Creek at Frontage Road, where streamflows were also the greatest. Total phosphorus loading patterns in Silver Bow Creek in 2014 were comparable to those observed in 2010-2013.

Table 1-11. Total phosphorus concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.111	0.115	0.079	0.083
SS-05A	Silver Bow Creek above Butte Reduction Works	0.091	0.139	0.067	0.121
SS-06G	Silver Bow Creek above WWTP	0.077	0.106	0.046	0.092
SS-07	Silver Bow Creek below WWTP	0.725	0.435	0.160	0.378
SS-08	Silver Bow Creek at Rocker	0.450	0.485	0.350	0.355
SS-10A	Silver Bow Creek above Sand Creek	0.367	0.375	0.269	0.413
SS-10B	Silver Bow Creek below Sand Creek	0.342	0.368	0.283	0.437
SS-11C	Silver Bow Creek above Browns Gulch	0.353	0.377	0.287	0.535
SS-11D	Silver Bow Creek below Browns Gulch	0.346	0.360	0.289	0.236
SS-13	Silver Bow Creek in Reach L	0.325	0.329	0.288	0.477
SS-14	Silver Bow Creek at Miles Crossing	0.320	0.323	0.249	0.648
SS-15A	Silver Bow Creek above German Gulch	0.312	0.303	0.225	0.351
SS-15G	German Gulch near confluence	0.048	0.022	0.026	0.037
SS-15B	Silver Bow Creek below German Gulch	0.218	0.126	0.191	0.286
SS-16	Silver Bow Creek in Reach P near Fairmont	0.221	0.130	0.196	0.225
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.188	0.148	0.197	0.198
SS-19	Silver Bow Creek at Frontage Road	0.186	0.154	0.174	0.191

Exceeds the summertime base numeric nutrient standard for total phosphorus [MDEQ, 2014b].

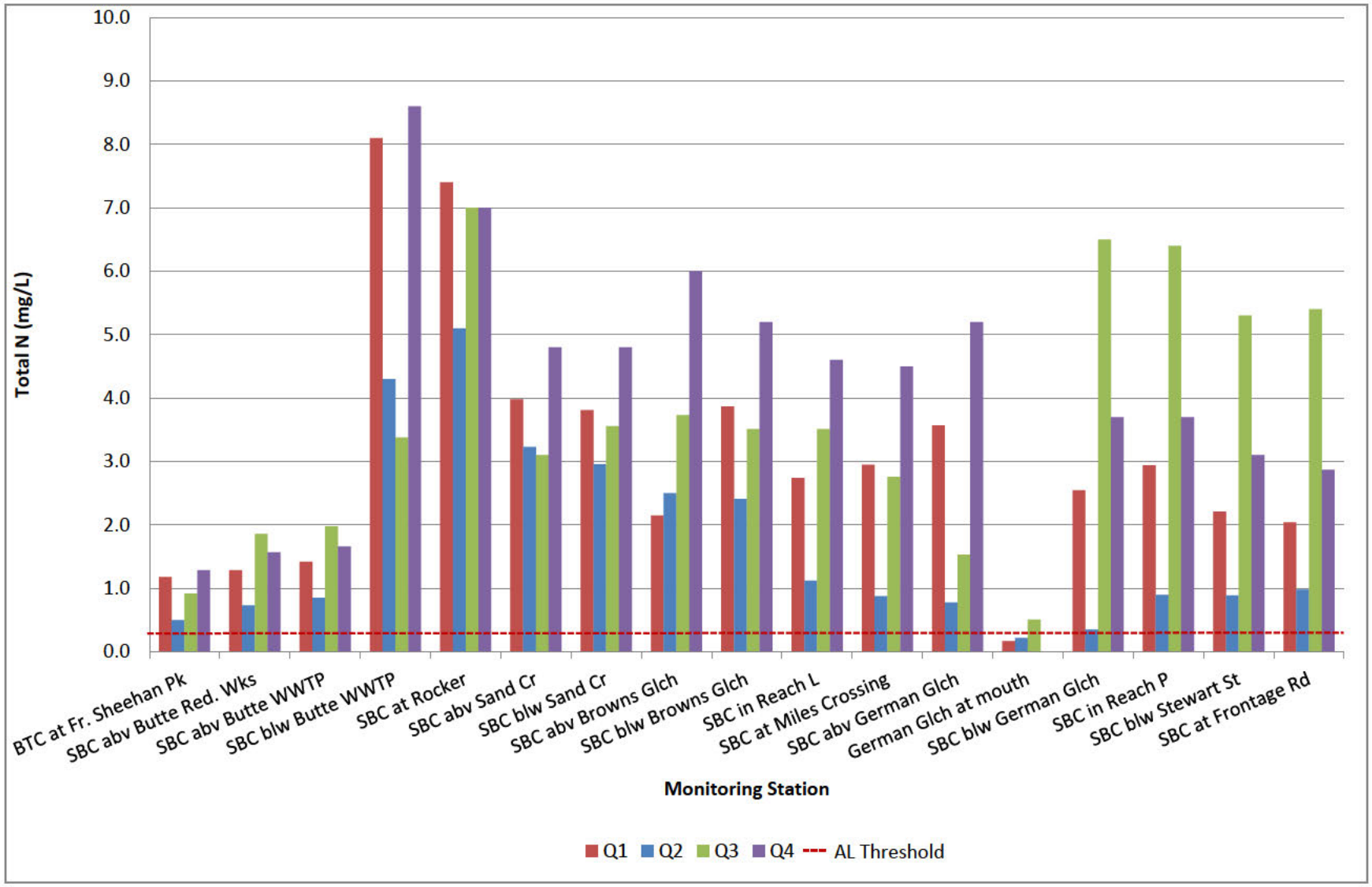

Figure 1-21. Total nitrogen concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. The red dashed line represents the base numeric total nitrogen nutrient standard [MDEQ, 2014b].

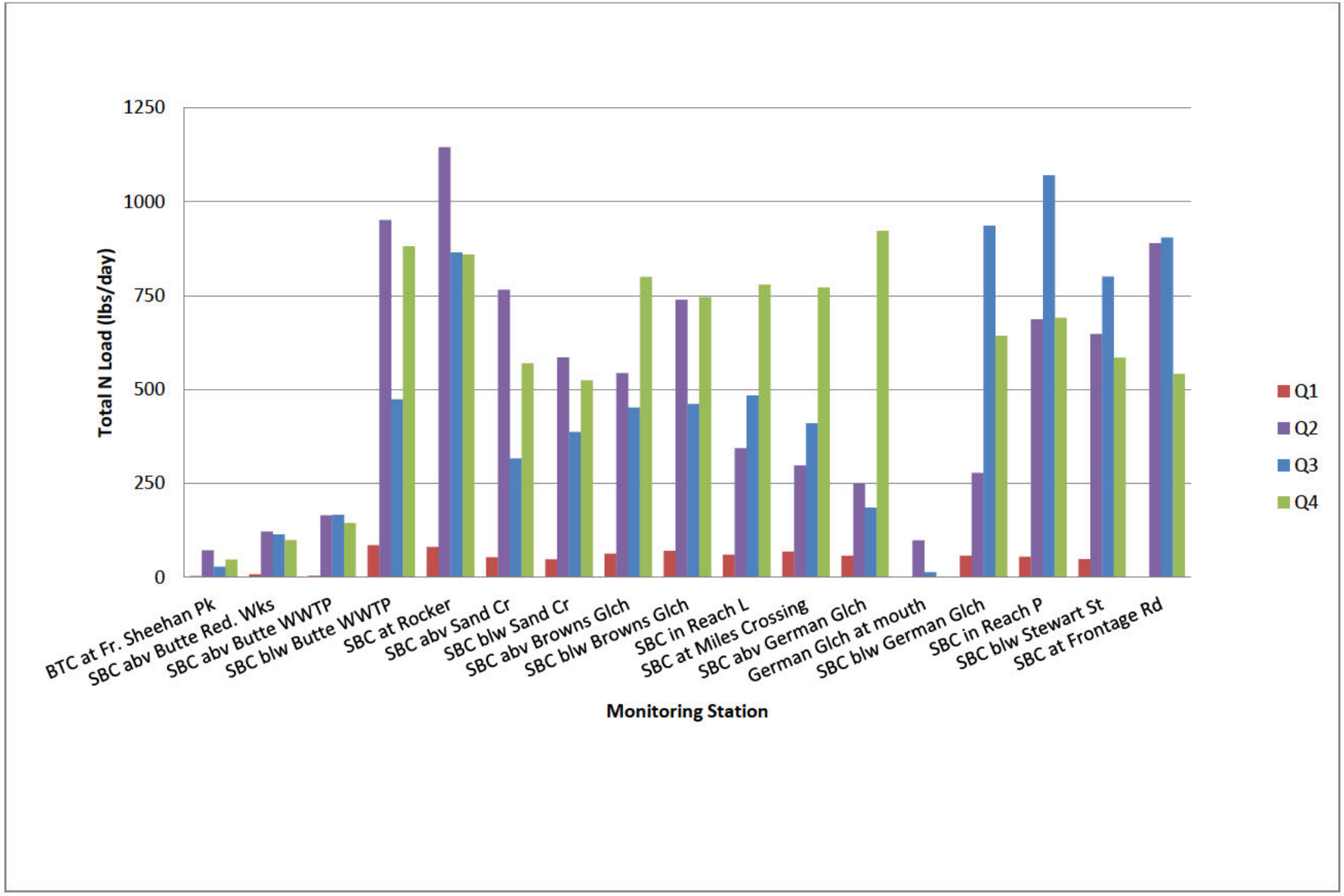

Figure 1-22. Total nitrogen loads at Streamside Tailings Operable Unit monitoring stations, 2014.

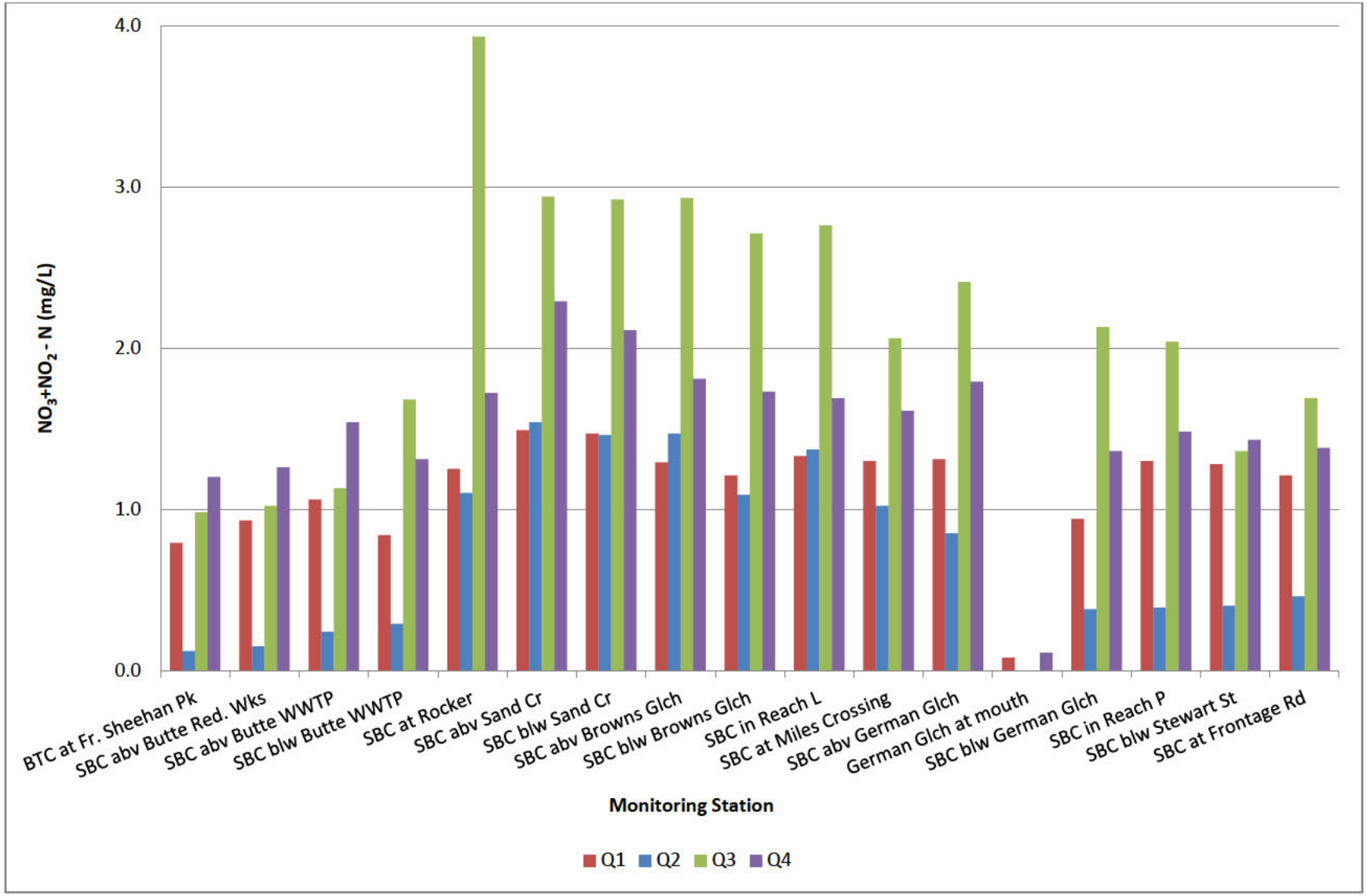

Figure 1-23. Nitrate plus nitrite nitrogen concentrations at Streamside Tailings Operable Unit monitoring stations, 2014.

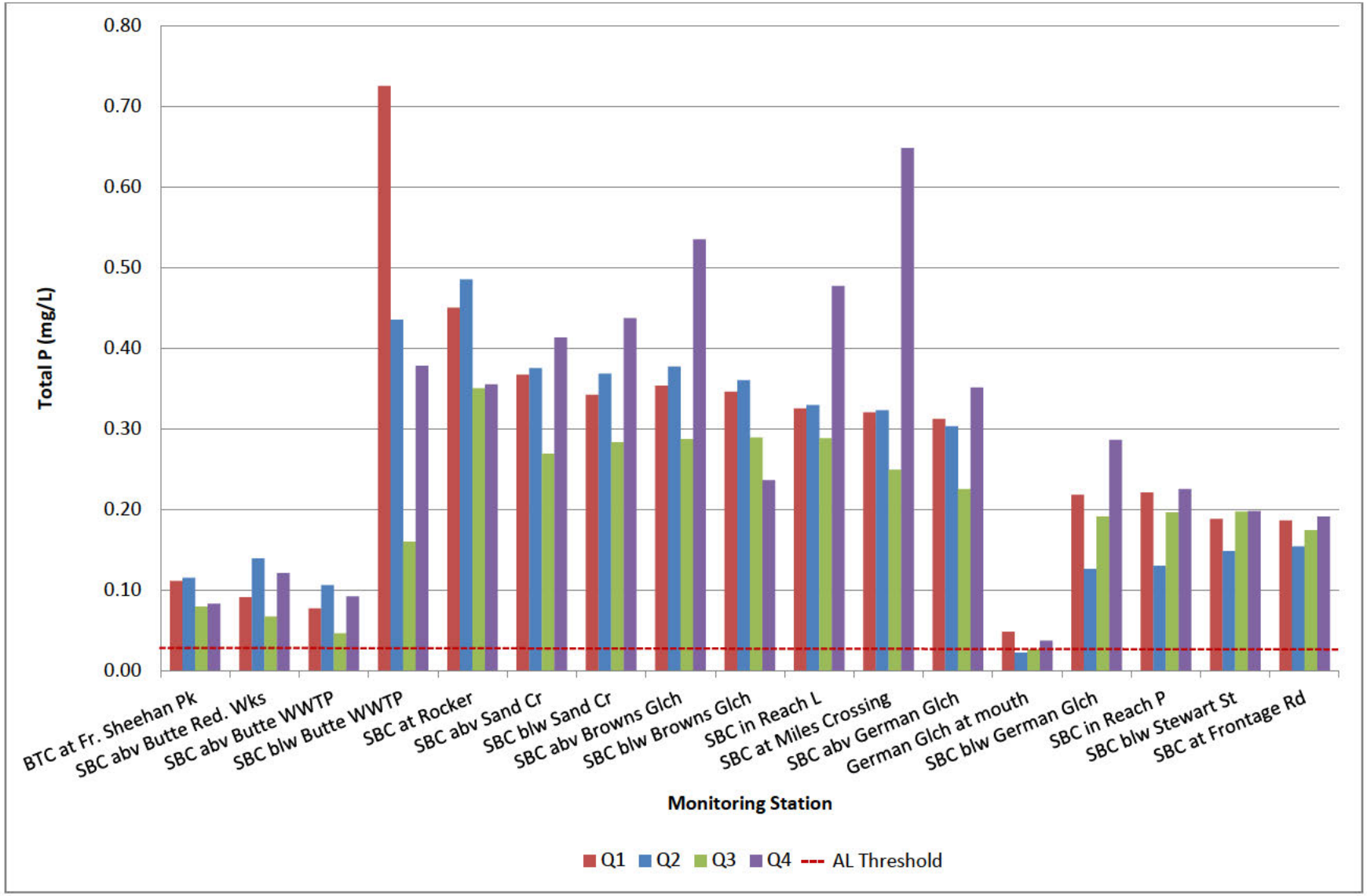

Figure 1-24. Total phosphorus concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. The red dashed line represents the base numeric total phosphorus nutrient standard [MDEQ, 2014b].

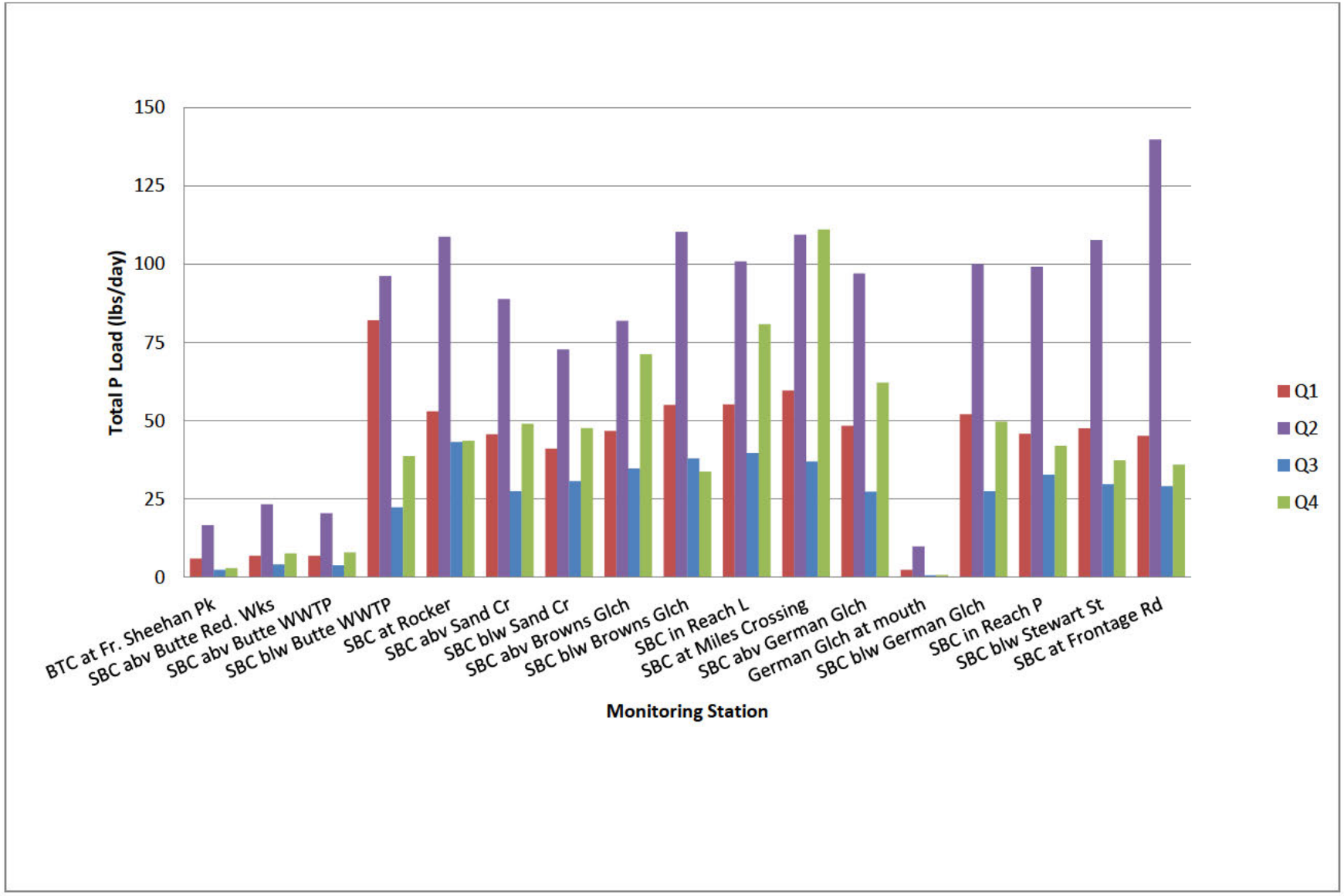

Figure 1-25. Total phosphorus loads at Streamside Tailings Operable Unit monitoring stations, 2014.

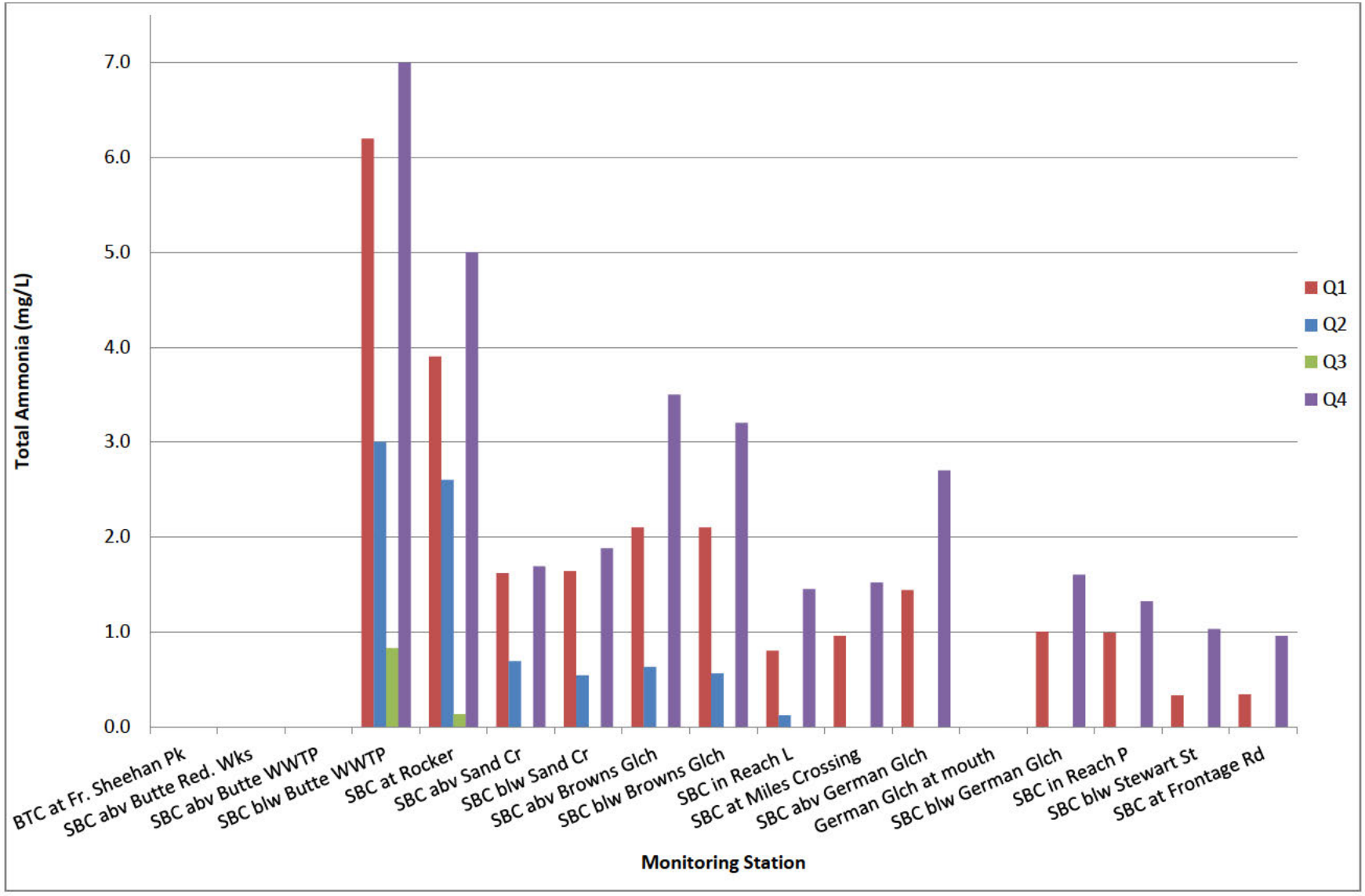

Figure 1-26. Total ammonia concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate values less than the analytical reporting level.

1.4.5 Contaminants of Concern

1.4.5.1 Arsenic

Arsenic concentrations at SSTOU monitoring stations during 2014 were consistently lowest in German Gulch and in Blacktail Creek, and higher in Silver Bow Creek. Arsenic concentrations in Silver Bow Creek appeared to fall into three spatial groupings showing similar concentrations in each group, as follows: 1) lowest concentrations were observed in the headwaters area from above the Butte Reduction Works and extending downstream to above Browns Gulch; 2) higher concentrations in Silver Bow Creek from below Browns Gulch to above German Gulch; and 3) intermediate concentrations in Silver Bow Creek from below German Gulch to the Frontage Road station [Figure 1-27].

Arsenic concentrations at SSTOU monitoring stations during 2014 quarterly monitoring events ranged from a low of 0.002 mg/L in Blacktail Creek in Q4 to a high of 0.016 mg/L in Silver Bow Creek above German Gulch in Q2. Most of the monitoring stations showed highest arsenic concentrations during spring snowmelt runoff conditions in Q2 (15 of 17 stations). The lowest concentrations at most stations (15 of 17 sites) were observed in Q4, when streamflows were quite low. Most of the arsenic measured at SSTOU monitoring stations during the 2014 quarterly monitoring events was present in the dissolved form rather than as a sediment-associated form [Figure 1-27].

Overall, concentrations of total recoverable arsenic at the SSTOU monitoring stations during monitoring events in 2014 were slightly higher than values observed during 2013, when many stations showed some quarterly measurements below the minimum analytical reporting limit. Examination of the longer term data set for selected stations with continual data extending back to 2005 shows that annual median total recoverable arsenic concentrations have declined at some monitoring stations since 2005 or 2006, including Silver Bow Creek below the Butte WWTP, at Rocker, below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity [Figure 1-28]. Total recoverable arsenic concentrations at the latter two of the above stations have shown the largest decreases over the 2005-2014 period. The Silver Bow Creek below Stewart Street at Opportunity station has shown the most improvement since 2010. Total recoverable arsenic concentrations appeared to have stabilized in recent years at most of the upstream monitoring stations, or increased slightly in 2014 compared to 2013.

Exceedances of the MDEQ [2012a] human health surface water standard (HHSWS) for total recoverable arsenic (0.010 mg/L) during 2014 were observed in six samples, all of which occurred during Q2. Affected sites included Silver Bow Creek above the Butte Reduction Works, above the Butte WWTP, and the four sites extending from above Browns Gulch to above German Gulch [Table 1-12]. The frequency of HHSWS exceedances for total recoverable arsenic in 2014 was higher (6 of 68 site measurements) than in 2013 (1 of 64 site measurements), but lower than in 2010 and 2011 (12 of 56 site measurements). None of the measured arsenic values during 2014 exceeded the MDEQ [2012a] acute or chronic ALS.

Figure 1-29 through Figure 1-34 present compliance ratios for total recoverable arsenic for Silver Bow Creek mainstem stations below the Butte WWTP, at Rocker, and located above and below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity.

For two of the displayed six stations, Silver Bow Creek below Browns Gulch and at Opportunity, the compliance ratio for the HHSWS appears to have declined over the past 10-year period. The compliance ratio at those two stations commonly exceeded 1.0 in earlier years but has only exceeded 1.0 at the station below Browns Gulch in one quarter (Q2 2014) during the 2012-2014 period. A declining compliance ratio trend was not apparent at the other four monitoring stations, but the HHSWS compliance ratio only rarely exceeded 1.0 at any of those stations during the past 10 years. Compliance ratios for the chronic ALS for total recoverable arsenic were similar to those described above for the HHSWS, with the below Browns Gulch and Opportunity stations showing the most improvement in chronic ALS compliance ratios. None of the stations evaluated in Figure 1-29 through Figure 1-34 had chronic ALS compliance ratios near 1.0 during the 2005–2014 period.

The 2014 arsenic load data showed very gradual downstream increases in loading during most quarterly monitoring events, and larger loads and inter-station increases during the Q2 spring runoff monitoring event. The largest between-station increases in arsenic loading were noted in the segment of Silver Bow Creek from above to below Browns Gulch [Figure 1-35]. Highest overall arsenic loading was observed at the downstream most monitoring site at Frontage Road during the high streamflow period in Q2. Peak seasonal rates of arsenic loading in 2014 were somewhat higher than in 2012-2013, but lower than during the high streamflow year of 2011.

Table 1-12. Total recoverable arsenic concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.004	0.009	0.003	0.002
SS-05A	Silver Bow Creek above Butte Reduction Works	0.005	0.011	0.005	0.004
SS-06G	Silver Bow Creek above WWTP	0.005	0.011	0.005	0.004
SS-07	Silver Bow Creek below WWTP	0.005	0.009	0.005	0.004
SS-08	Silver Bow Creek at Rocker	0.005	0.010	0.006	0.005
SS-10A	Silver Bow Creek above Sand Creek	0.006	0.009	0.006	0.006
SS-10B	Silver Bow Creek below Sand Creek	0.006	0.009	0.006	0.005
SS-11C	Silver Bow Creek above Browns Gulch	0.007	0.009	0.007	0.007
SS-11D	Silver Bow Creek below Browns Gulch	0.008	0.014	0.008	0.007
SS-13	Silver Bow Creek in Reach L	0.008	0.014	0.007	0.008
SS-14	Silver Bow Creek at Miles Crossing	0.008	0.015	0.008	0.009
SS-15A	Silver Bow Creek above German Gulch	0.008	0.016	0.008	0.006
SS-15G	German Gulch near confluence	0.004	0.004	0.004	0.003
SS-15B	Silver Bow Creek below German Gulch	0.007	0.009	0.007	0.005
SS-16	Silver Bow Creek in Reach P near Fairmont	0.008	0.009	0.009	0.007
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.008	0.009	0.010	0.007
SS-19	Silver Bow Creek at Frontage Road	0.008	0.009	0.010	0.006

ND Not detected at analytical reporting limit.

Exceeds the human health surface water standard [MDEQ, 2012a].

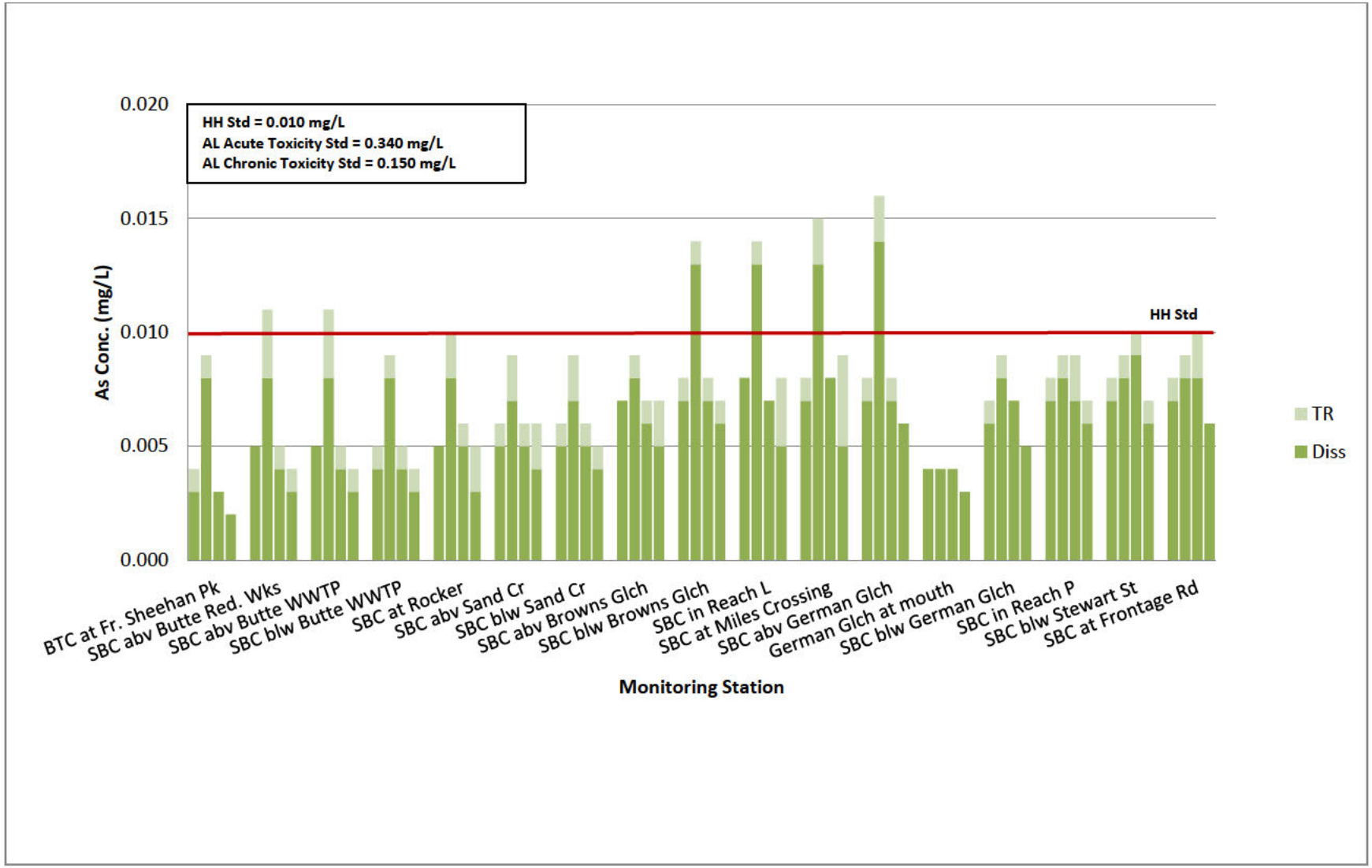

Figure 1-27. Total recoverable (TR) and dissolved (Diss) arsenic concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. Human health (HH Std) and aquatic life toxicity (AL Acute/Chronic Toxicity Std) standards for total recoverable arsenic are shown for reference.

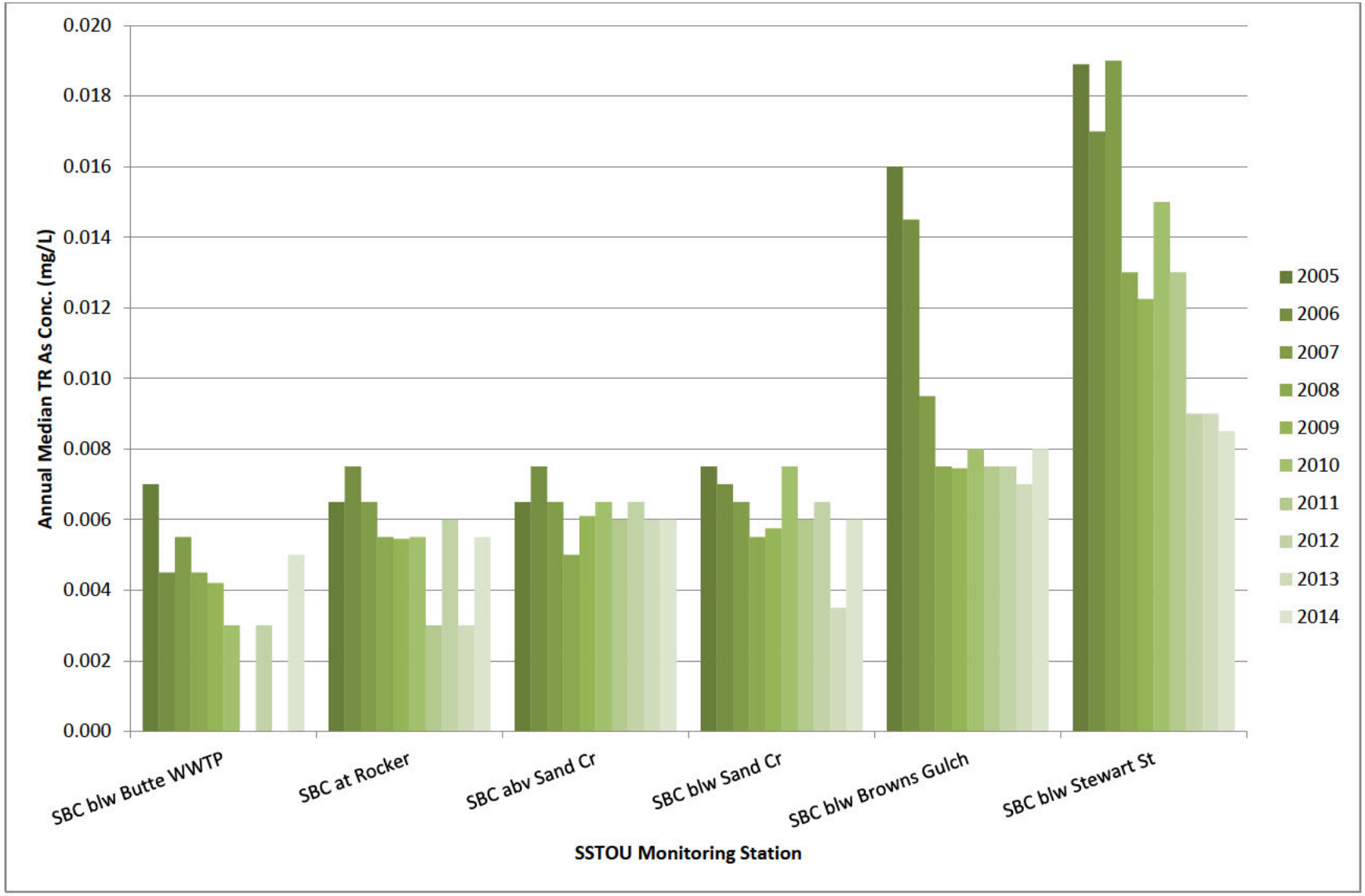

Figure 1-28. Annual median total recoverable arsenic concentrations at selected Streamside Tailings Operable Unit monitoring stations, 2005-2014.

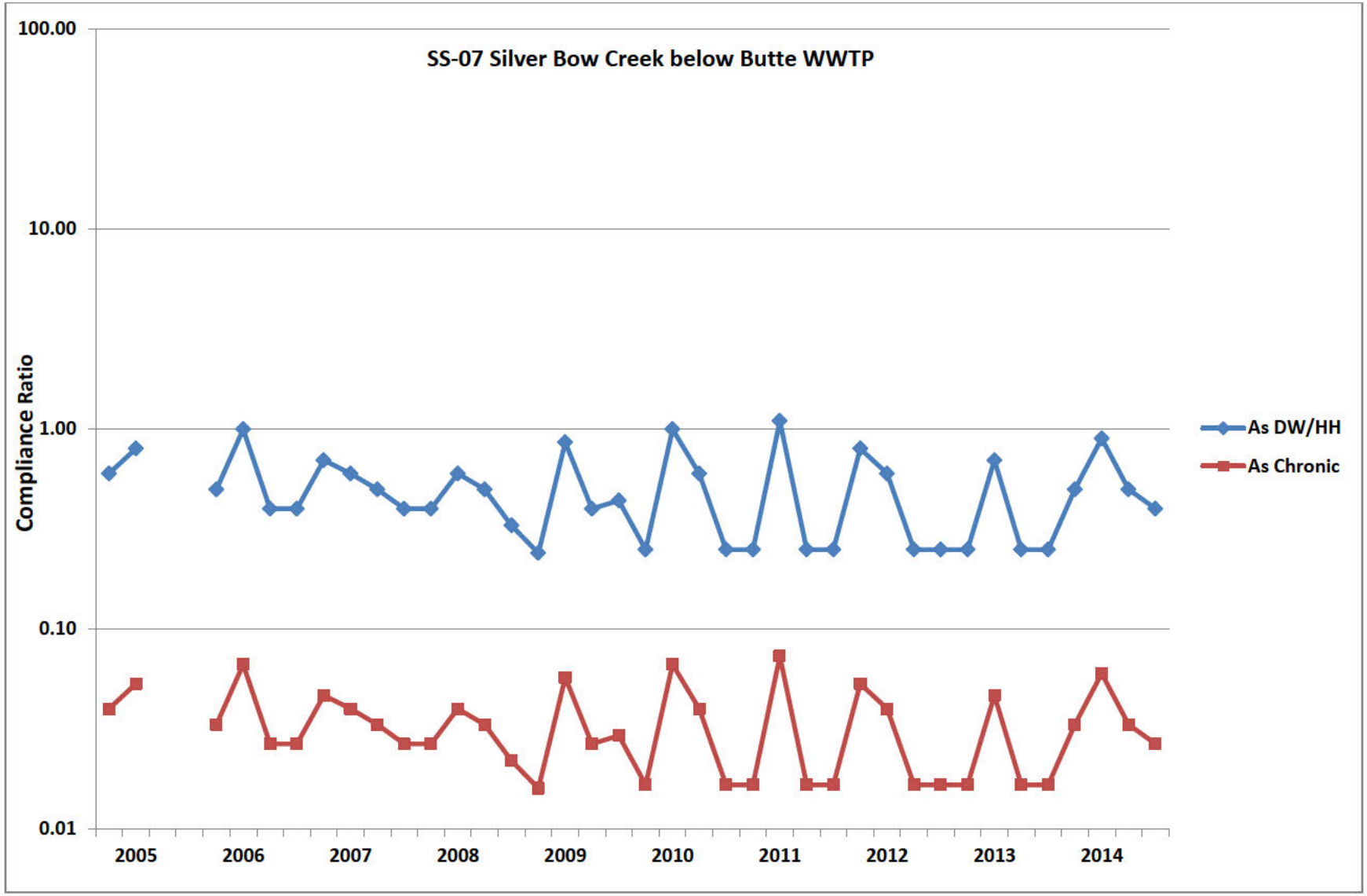

Figure 1-29. Total recoverable arsenic compliance ratios for Silver Bow Creek below the Butte wastewater treatment plant discharge, 2005–2014. Compliance ratios computed from quarterly measurements.

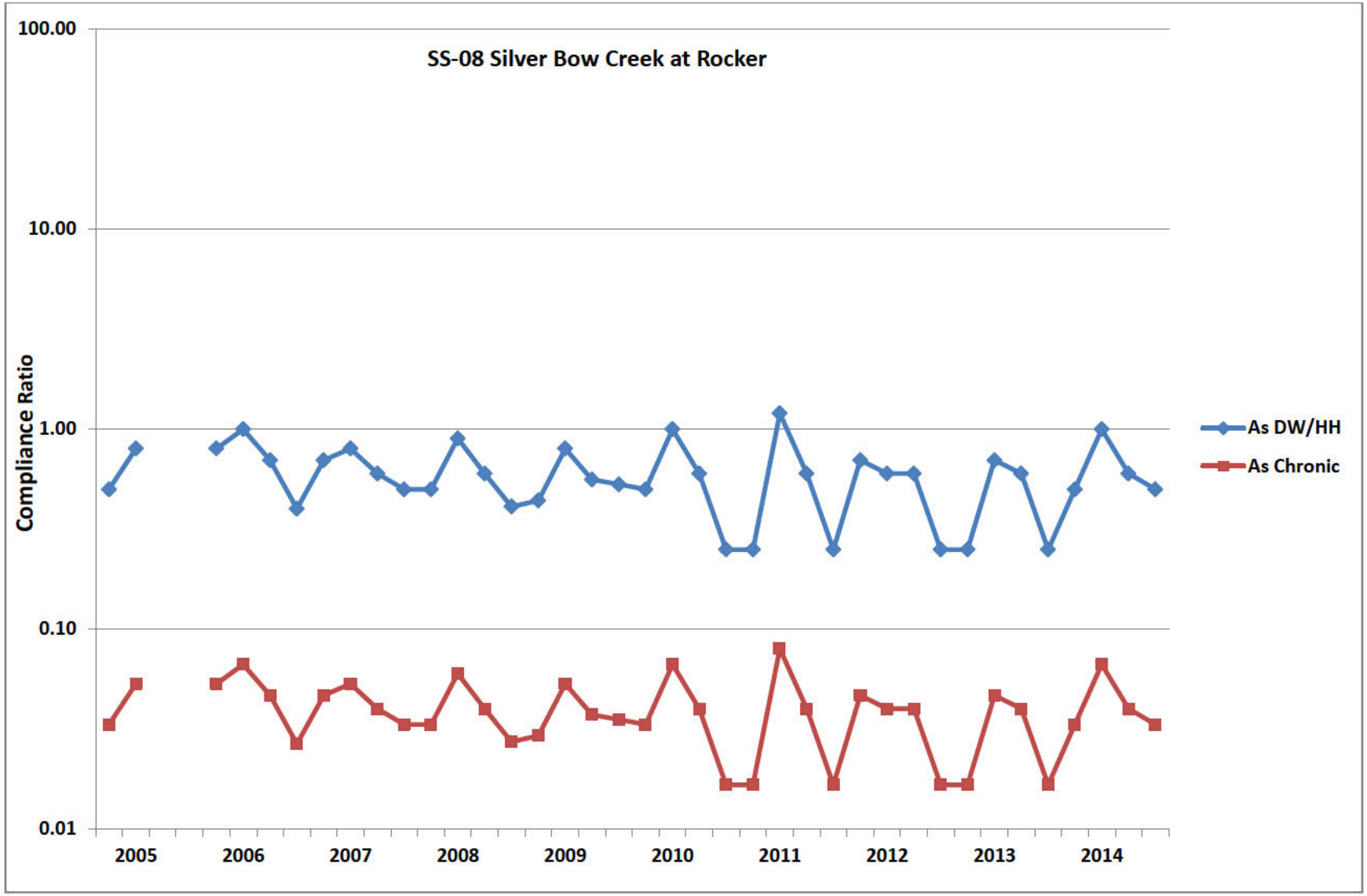

Figure 1-30. Total recoverable arsenic compliance ratios for Silver Bow Creek at Rocker, 2005–2014. Compliance ratios computed from quarterly measurements.

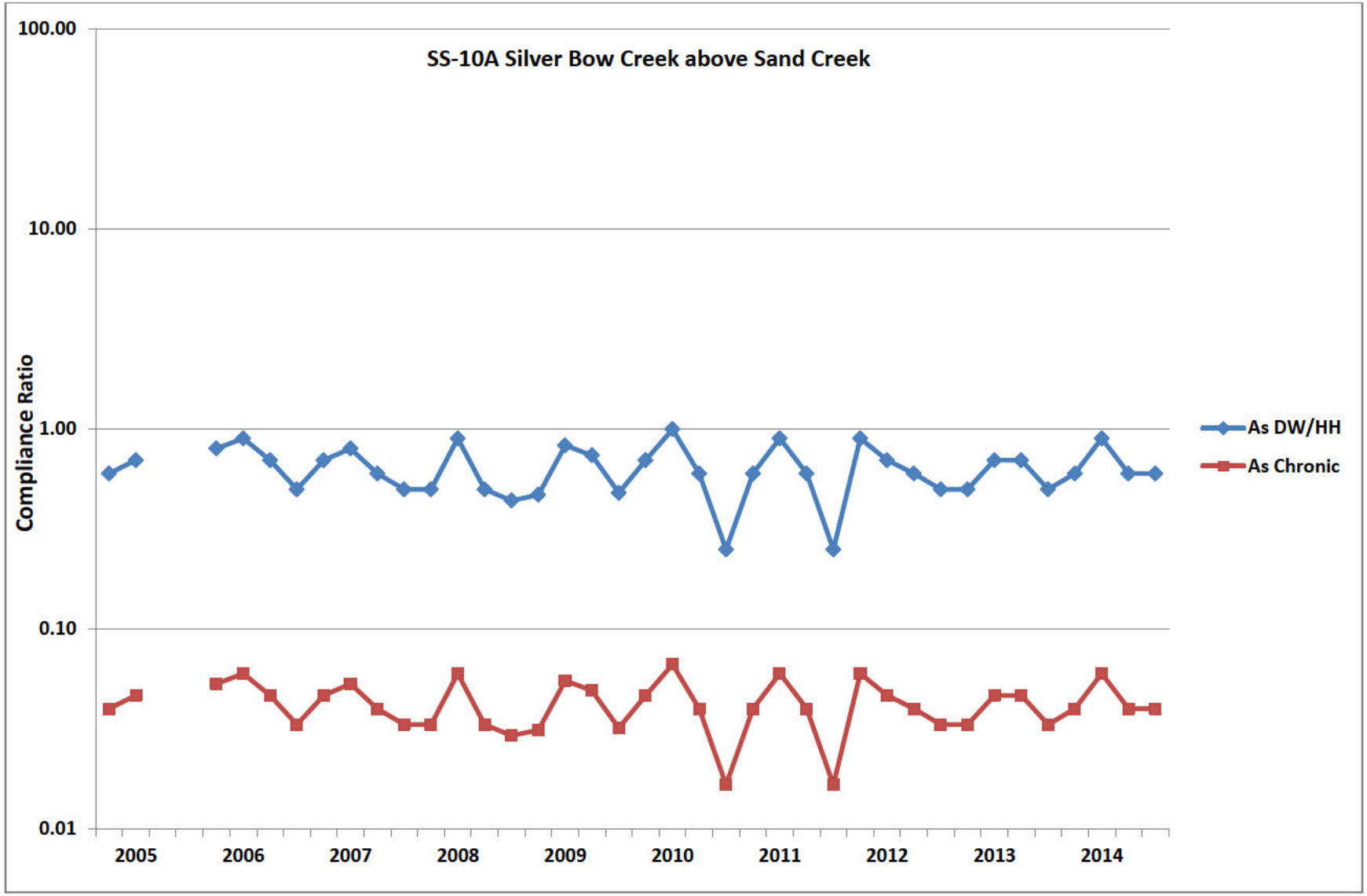

Figure 1-31. Total recoverable arsenic compliance ratios for Silver Bow Creek above Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

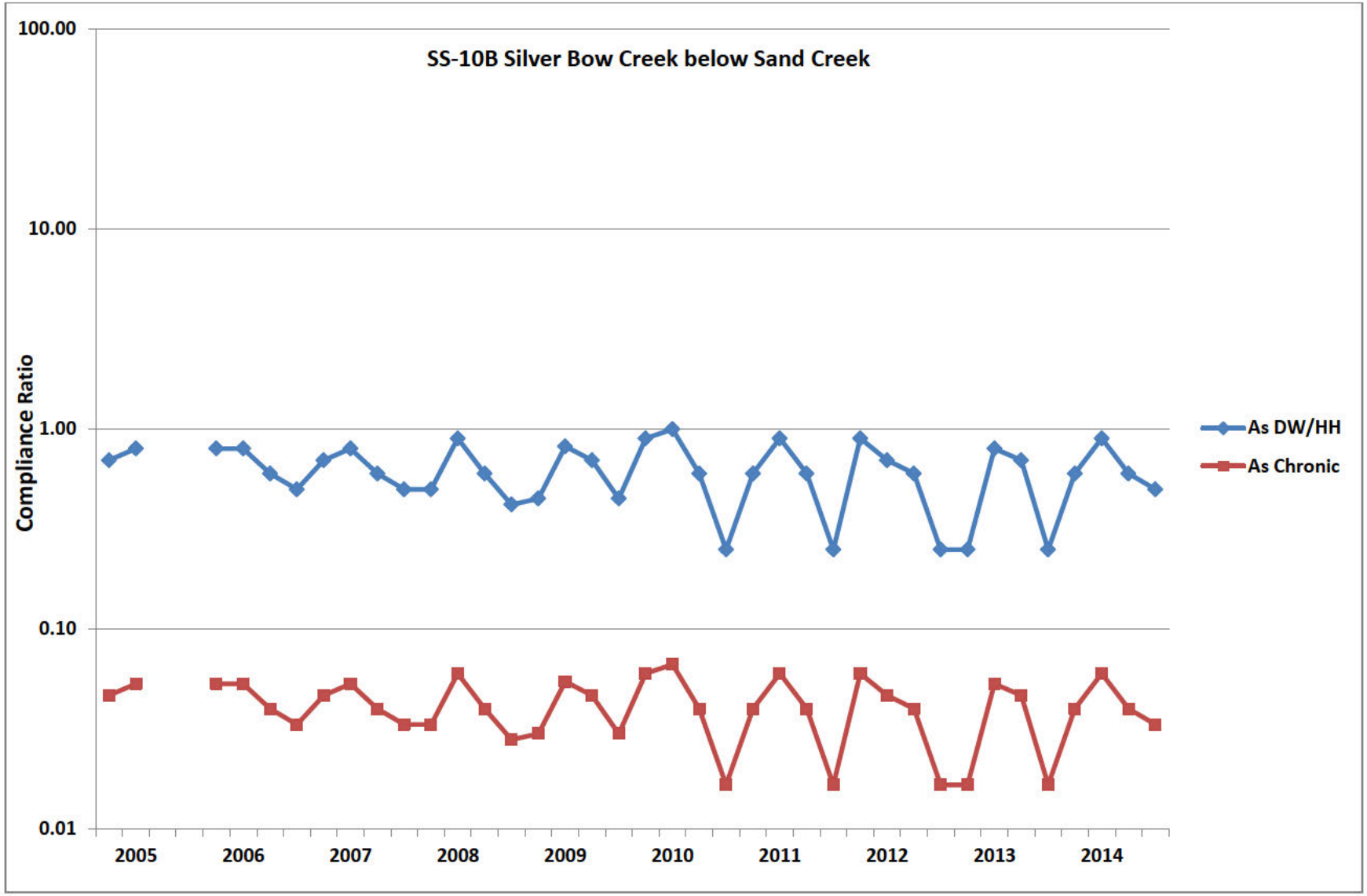

Figure 1-32. Total recoverable arsenic compliance ratios for Silver Bow Creek below Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

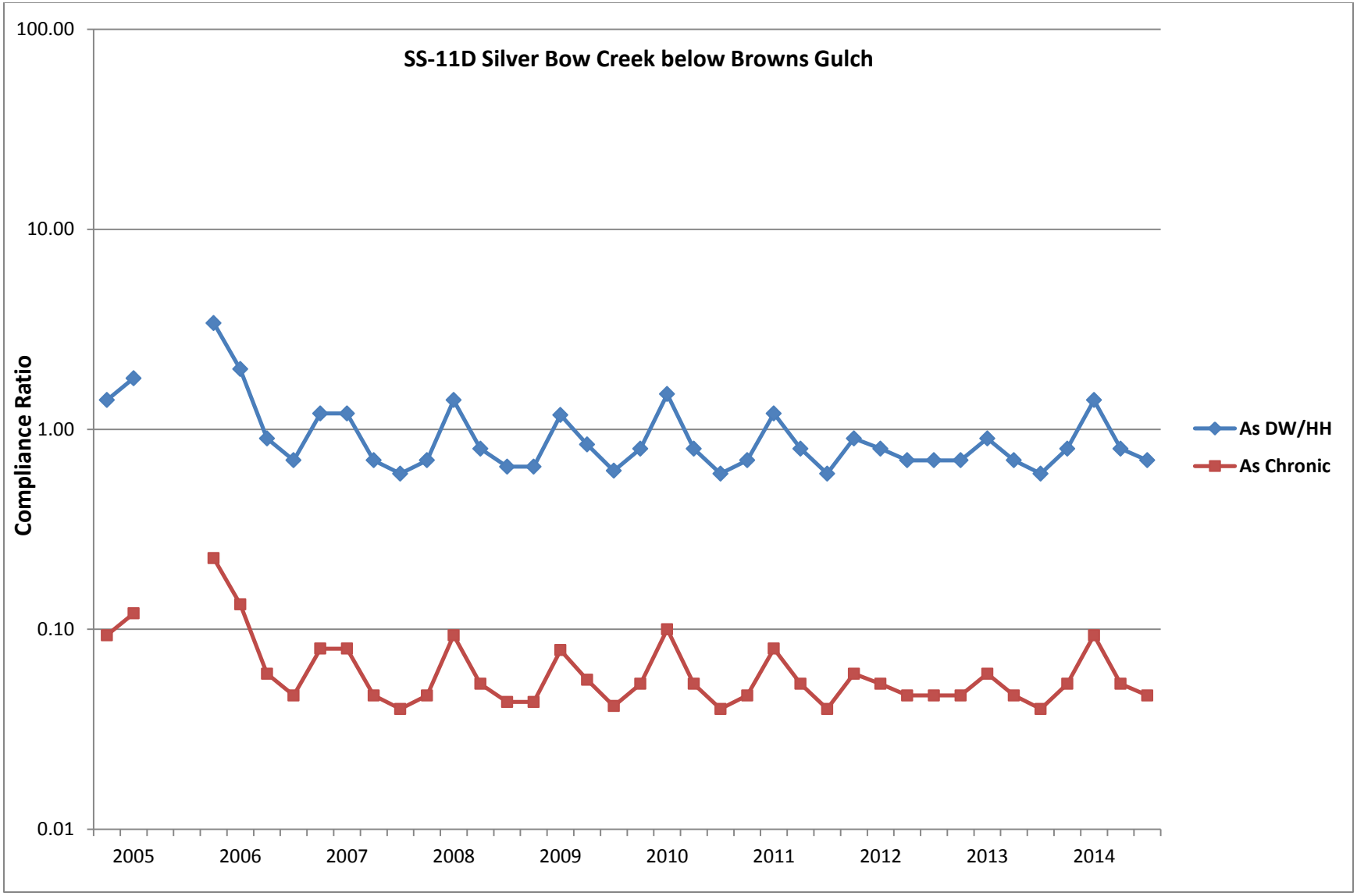

Figure 1-33. Total recoverable arsenic compliance ratios for Silver Bow Creek below Browns Gulch, 2005–2014. Compliance ratios computed from quarterly measurements.

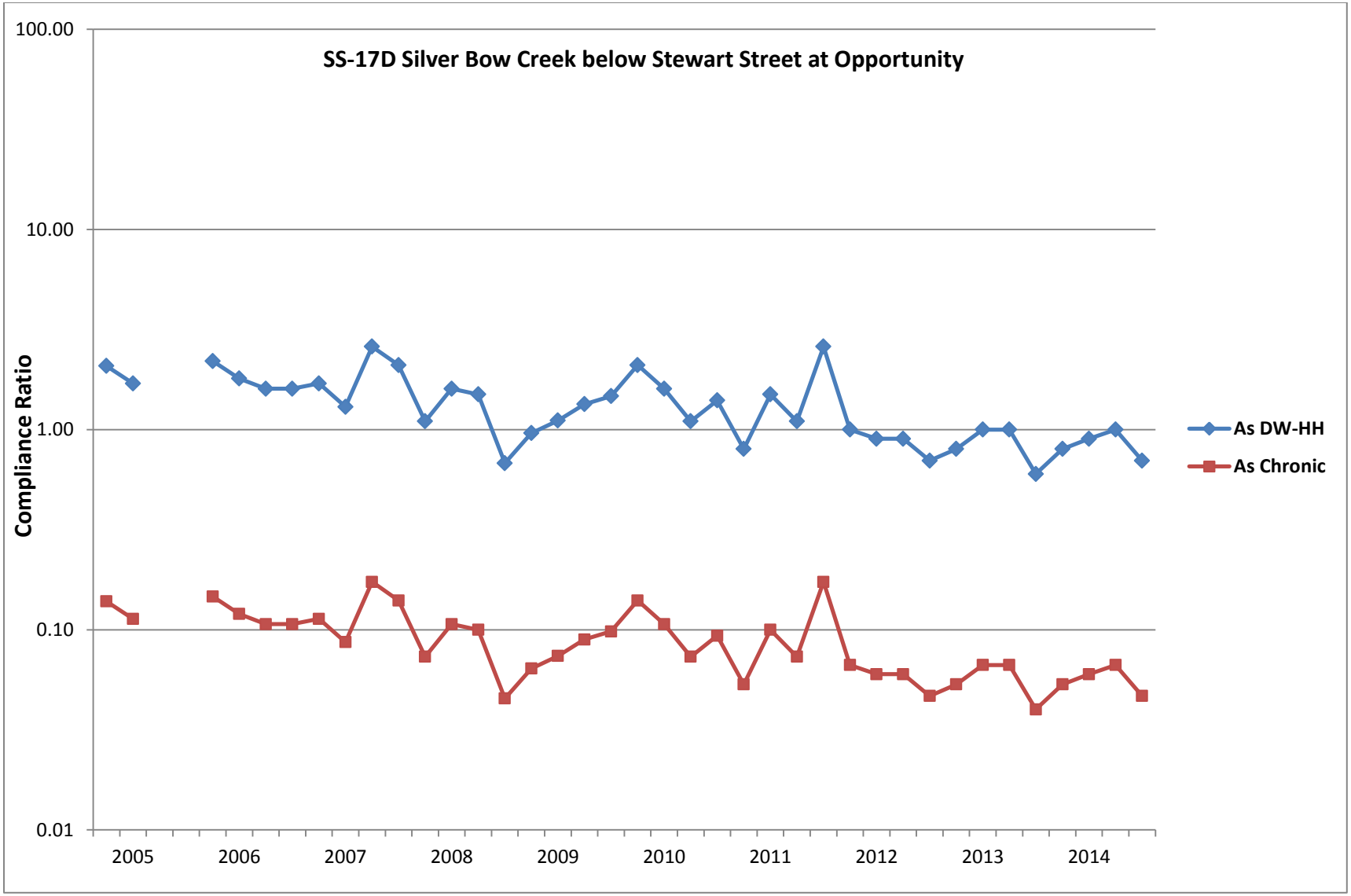

Figure 1-34. Total recoverable arsenic compliance ratios for Silver Bow Creek below Stewart Street at Opportunity, 2005–2014. Compliance ratios computed from quarterly measurements.

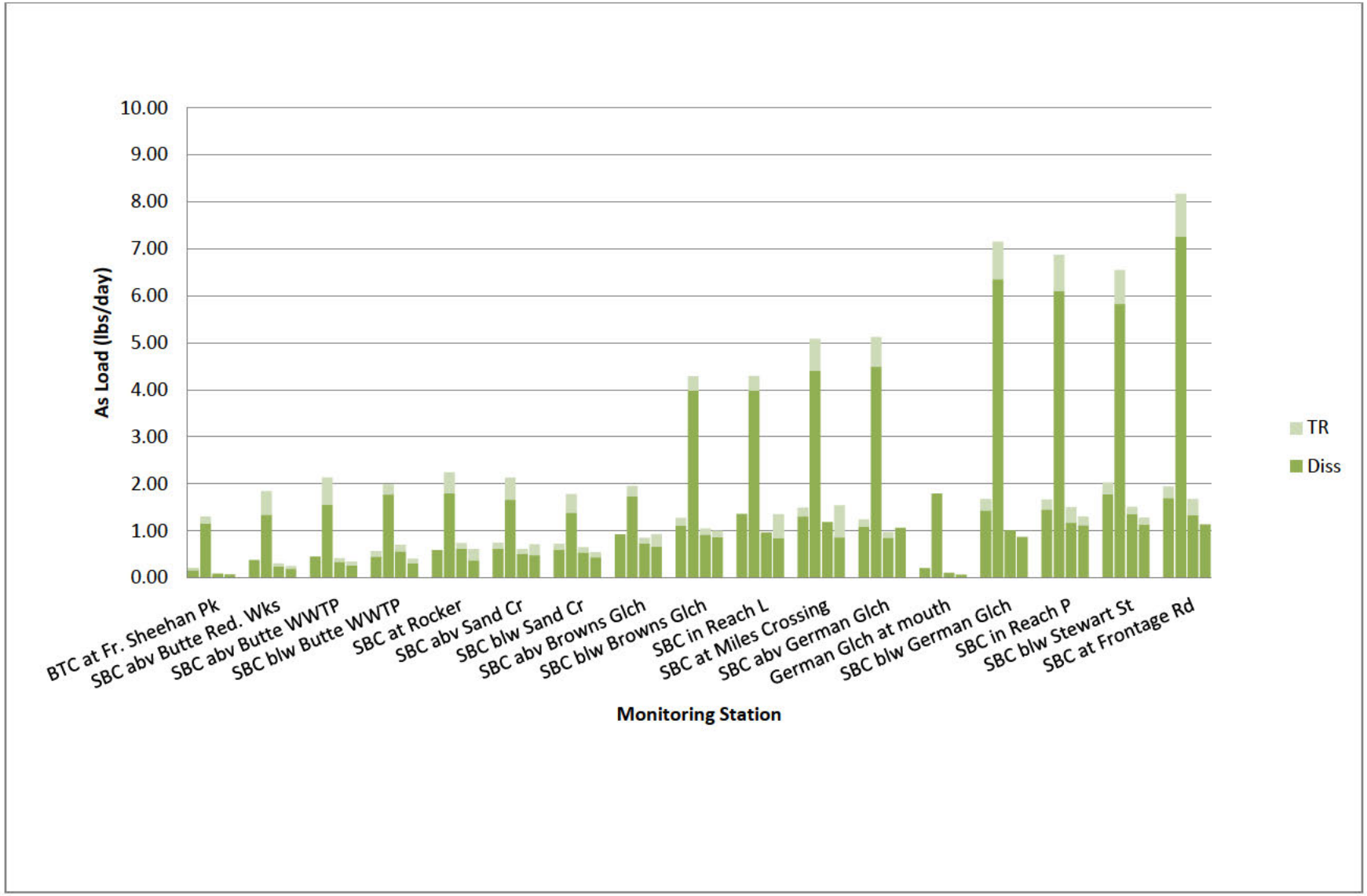

Figure 1-35. Total recoverable (TR) and dissolved (Diss) arsenic loads at Streamside Tailings Operable Unit monitoring stations, 2014.

1.4.5.2 Cadmium

Cadmium concentrations at SSTOU monitoring stations during quarterly monitoring in 2014 showed generally gradual upstream to downstream increases in Silver Bow Creek from above the Butte Reduction Works to below Stewart Street at Opportunity. A slight decline was observed from above to below the German Gulch inflow. The overall highest total recoverable cadmium concentration in 2014 was observed in Silver Bow Creek at Miles Crossing in Q4, in association with elevated turbidity and total suspended sediment concentrations. Stations with elevated cadmium concentrations in Q4 included Silver Bow Creek above and below Sand Creek, above and below Browns Gulch, the site in Reach L, and at Miles Crossing. The cadmium concentration at Miles Crossing represents the second highest value that has been observed at that site since 2010, and was only exceeded in Q4 of 2012 during similar conditions of elevated turbidity and total suspended sediment.

Cadmium concentrations were consistently low in German Gulch at its mouth and in Blacktail Creek at Father Sheehan Park. Dissolved cadmium showed less spatial variation than total recoverable cadmium. Highest dissolved cadmium concentrations were observed in Silver Bow Creek in Reach P, below Stewart Street at Opportunity, and at Frontage Road in Q1 and/or Q4. There was no clear seasonal trend for cadmium concentrations during 2014, except for elevated concentrations at several stations in Q4. Highest concentrations were noted in Q1 at six sites, in Q2 at three sites, and in Q4 at eight sites.

The proportion of cadmium present in the dissolved phase was frequently below 50% at many of the SSTOU monitoring stations during 2014. However, there was considerable variability in the total recoverable to dissolved cadmium ratio seasonally and by monitoring site [Figure 1-36]. In general, more of the cadmium tended to be present in a sediment associated (total recoverable) state during the spring runoff period in Q2 and during the high turbidity conditions encountered at several sites in Q4. Most of the cadmium at the Silver Bow Creek at Rocker site in Q1, and at the three lower-most sites on Silver Bow Creek in Q4, was in a dissolved form.

Concentrations of total recoverable cadmium at the SSTOU monitoring network stations in 2014 were within the range of values observed in 2010-2013. A comparison of annual median total recoverable cadmium concentrations at selected Silver Bow Creek stations during the 2005–2014 period indicates that median concentrations have generally trended downward in the first five years of the 10-year period examined [Figure 1-37]. However, total recoverable cadmium concentrations increased somewhat since 2009 at several stations, particularly during 2010-2012. Median total recoverable cadmium concentrations in 2014 were the same or lower than those calculated for 2013 at four of the six stations examined, and were slightly higher than 2013 median concentrations at two sites. Silver Bow Creek below Stewart Street at Opportunity has shown a major, and continuing, decline in median total recoverable cadmium concentrations over the past four years.

Exceedances of the ALS for total recoverable cadmium were documented several times during each of the 2014 monitoring events [Table 1-13]. Six of the 17 monitoring stations showed no exceedances of the ALS during any of the quarterly events, eight stations showed one

exceedance each of the chronic ALS in four quarterly monitoring events, one station showed two exceedances of the chronic ALS, and one station showed three exceedances of the chronic ALS. Total recoverable cadmium concentrations in Silver Bow Creek below Stewart Street at Opportunity experienced exceedances of the chronic ALS during all four monitoring events. The overall frequency of exceedances of the cadmium ALS in 2014 (17 of 68 individual site measurements) was higher than in 2013 (7 of 64 site measurements), comparable to 2012 (16/56 observations), and lower than in 2011 (27 of 56 observations) or 2010 (24 of 56 observations). No exceedances of the acute ALS or the HHSWS occurred in either of 2013 or 2014.

Figure 1-38 through Figure 1-43 present compliance ratios for total recoverable cadmium for Silver Bow Creek mainstem stations below the Butte WWTP, at Rocker, and located above and below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity (SS-17D).

Aquatic life compliance ratios for cadmium appear to have declined since 2005 at most of the six stations that were examined. The greatest improvements occurred at the station below the Butte WWTP, where compliance ratios declined from a high of 8.76 in Q1 of 2006 to a low of 0.10 in Q4 of 2012 [Figure 1-38]. Total recoverable cadmium compliance ratios at that site increased somewhat in 2013-2014 but were below historical levels. Compliance ratios at most of the other stations improved in the earlier years (2005–2007) of the nine-year period examined, followed by more static trends in recent years (2008–2014). An exception to that pattern is the Silver Bow Creek below Stewart Street at Opportunity station, where most improvements in compliance ratios have been noted since 2009, commensurate with ongoing remediation in and upstream from that stream segment during that time period [Figure 1-43]. Several sites showed an increase in the cadmium ALS compliance ratio in Q4 2014 in conjunction with the high turbidity, total suspended sediment and COC metals concentrations.

The 2014 load data indicated a gradual increase in cadmium loads from above the Butte Reduction Works downstream to the Opportunity or Frontage Road sites. Highest overall cadmium loading was noted during spring snowmelt runoff in Q2 2014 at the Opportunity site. This spatial pattern of cadmium loading has been observed in previous years. In contrast, the Q4 2014 monitoring event showed higher cadmium loads at the Silver Bow Creek monitoring sites above and below Sand Creek, above Browns Gulch, in Reach L, and at Miles Crossing than during spring runoff conditions in Q2.

Table 1-13. Total recoverable cadmium concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.00012	0.00005	ND	ND
SS-05A	Silver Bow Creek above Butte Reduction Works	0.00012	0.00012	0.00011	0.00017
SS-06G	Silver Bow Creek above WWTP	0.00015	0.00017	0.00015	0.00014
SS-07	Silver Bow Creek below WWTP	0.00015	0.00012	0.00014	0.00012
SS-08	Silver Bow Creek at Rocker	0.00025	0.00023	0.00025	0.00031
SS-10A	Silver Bow Creek above Sand Creek	0.00029	0.00023	0.00025	0.00047
SS-10B	Silver Bow Creek below Sand Creek	0.00032	0.00024	0.00024	0.00072
SS-11C	Silver Bow Creek above Browns Gulch	0.00036	0.00028	0.00027	0.00055
SS-11D	Silver Bow Creek below Browns Gulch	0.00032	0.00025	0.00031	0.00051
SS-13	Silver Bow Creek in Reach L	0.00038	0.00022	0.00028	0.00090
SS-14	Silver Bow Creek at Miles Crossing	0.00038	0.00027	0.00023	0.00119
SS-15A	Silver Bow Creek above German Gulch	0.00047	0.00029	0.00025	0.00031
SS-15G	German Gulch near confluence	0.00003	0.00004	ND	ND
SS-15B	Silver Bow Creek below German Gulch	0.00032	0.00034	0.00020	0.00021
SS-16	Silver Bow Creek in Reach P near Fairmont	0.00097	0.00020	0.00040	0.00044
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.00058	0.00038	0.00045	0.00049
SS-19	Silver Bow Creek at Frontage Road	0.00054	0.00026	0.00043	0.00047

ND Not detected at analytical reporting limit.

Exceeds the chronic aquatic life standard [MDEQ, 2012a].

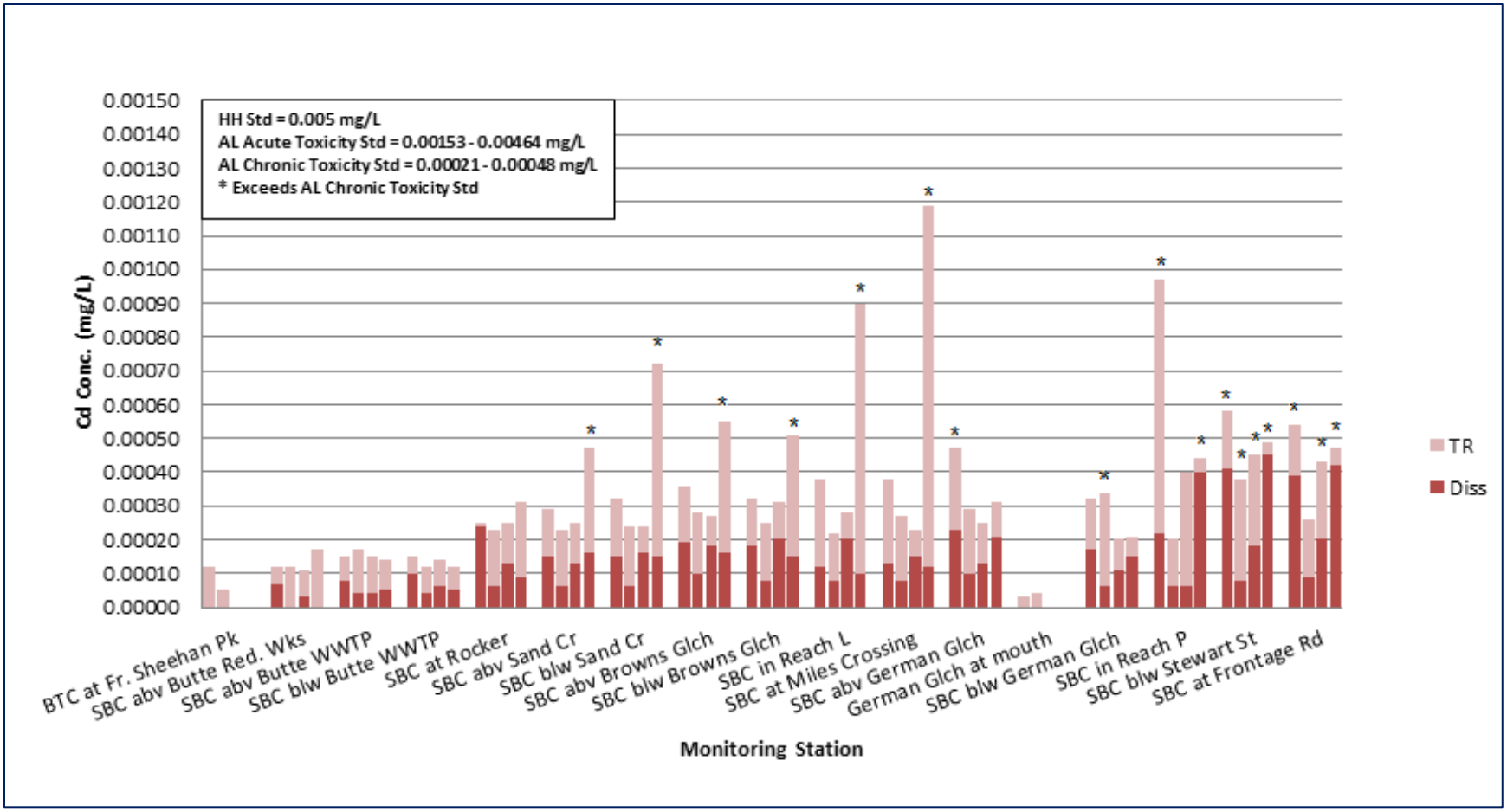

Figure 1-36. Total recoverable (TR) and dissolved (Diss) cadmium concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. Human Health (HH Std) and aquatic life toxicity (AL Acute/Chronic Toxicity Std) standards for total recoverable cadmium are shown for reference.

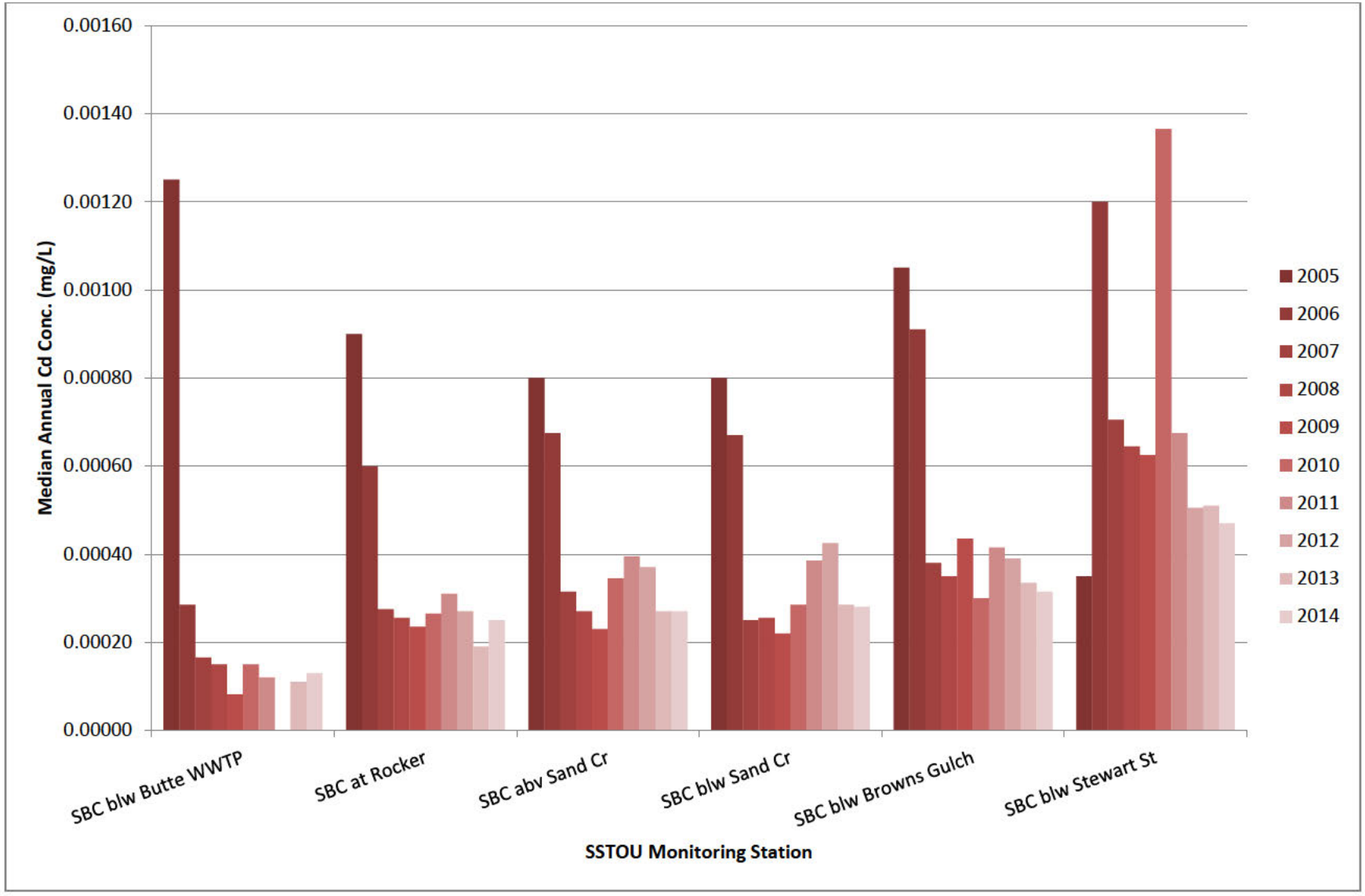

Figure 1-37. Annual median total recoverable cadmium concentrations at selected Streamside Tailings Operable Unit monitoring stations, 2005–2014.

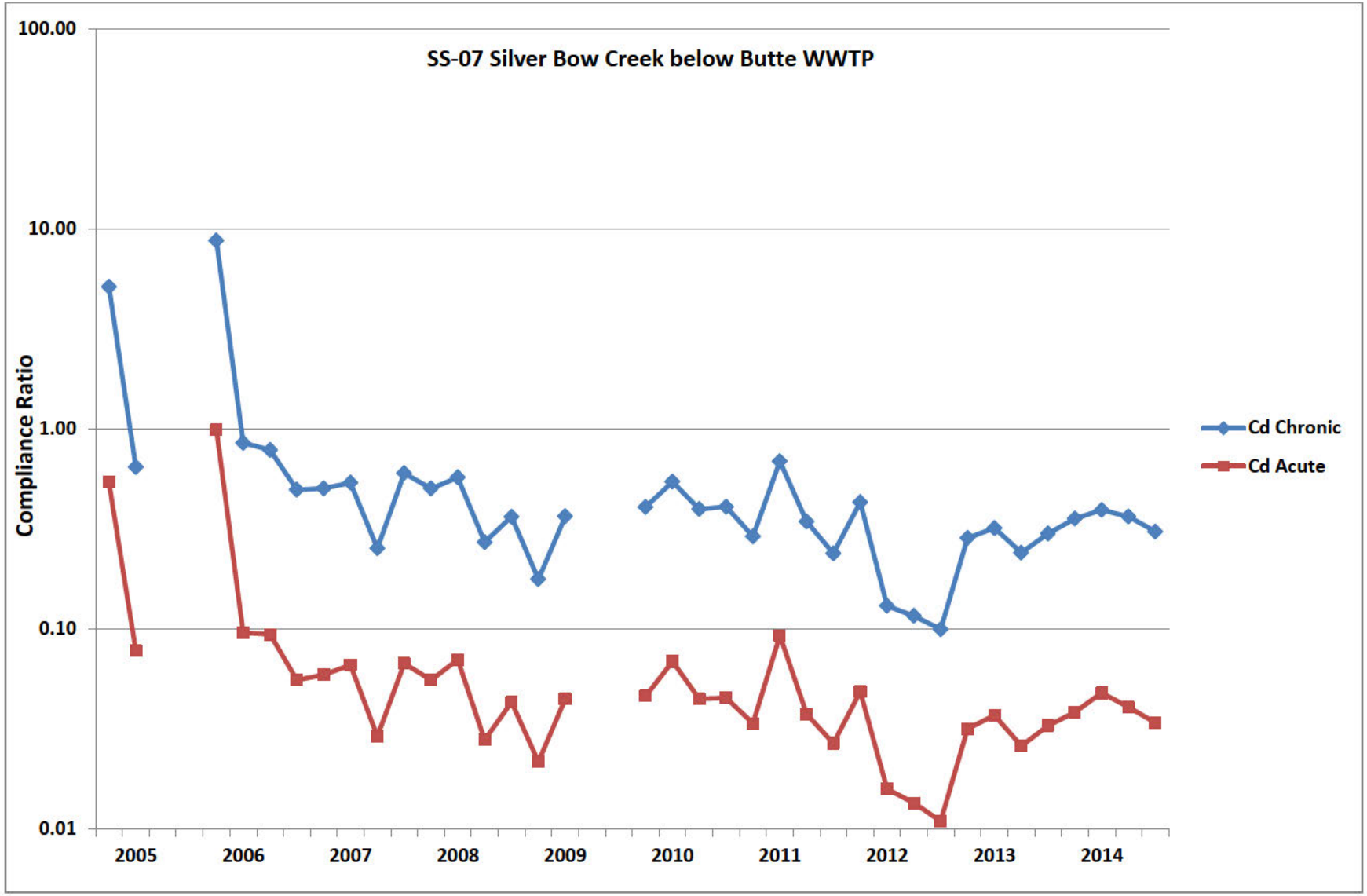

Figure 1-38. Total recoverable cadmium compliance ratios for Silver Bow Creek below the Butte wastewater treatment plant discharge, 2005–2015. Compliance ratios computed from quarterly measurements.

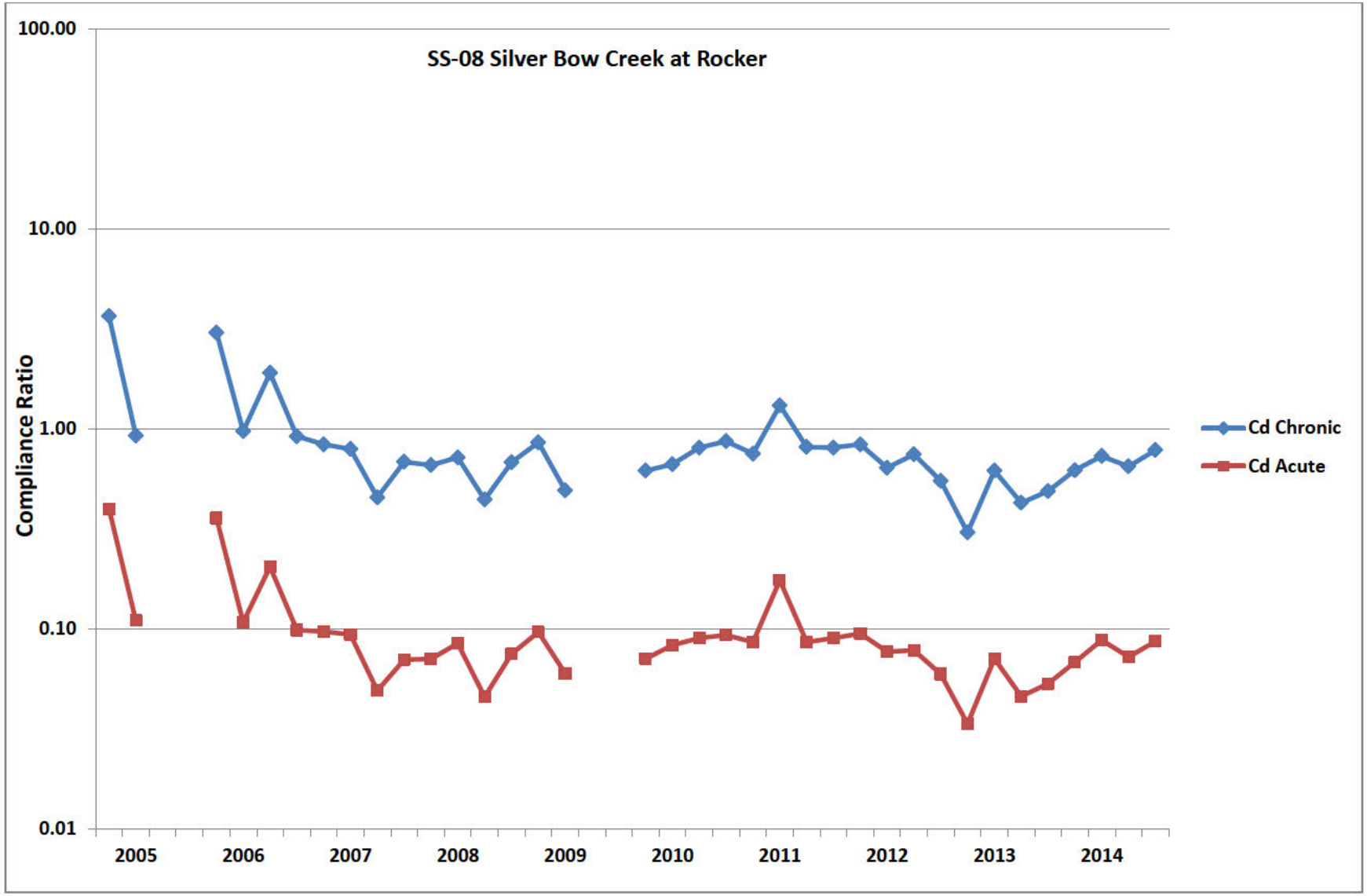

Figure 1-39. Total recoverable cadmium compliance ratios for Silver Bow Creek at Rocker, 2005–2014. Compliance ratios computed from quarterly measurements.

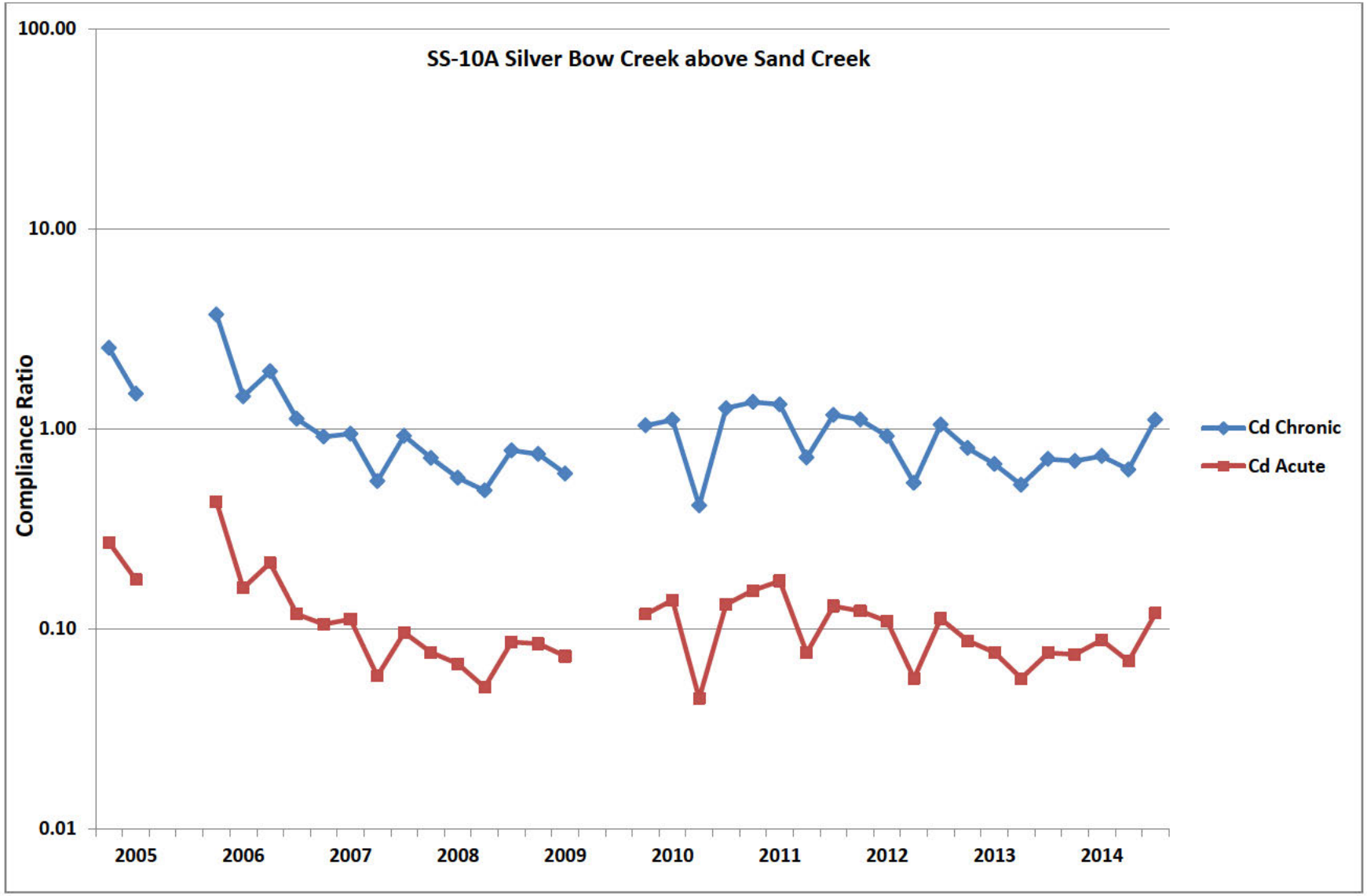

Figure 1-40. Total recoverable cadmium compliance ratios for Silver Bow Creek above Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

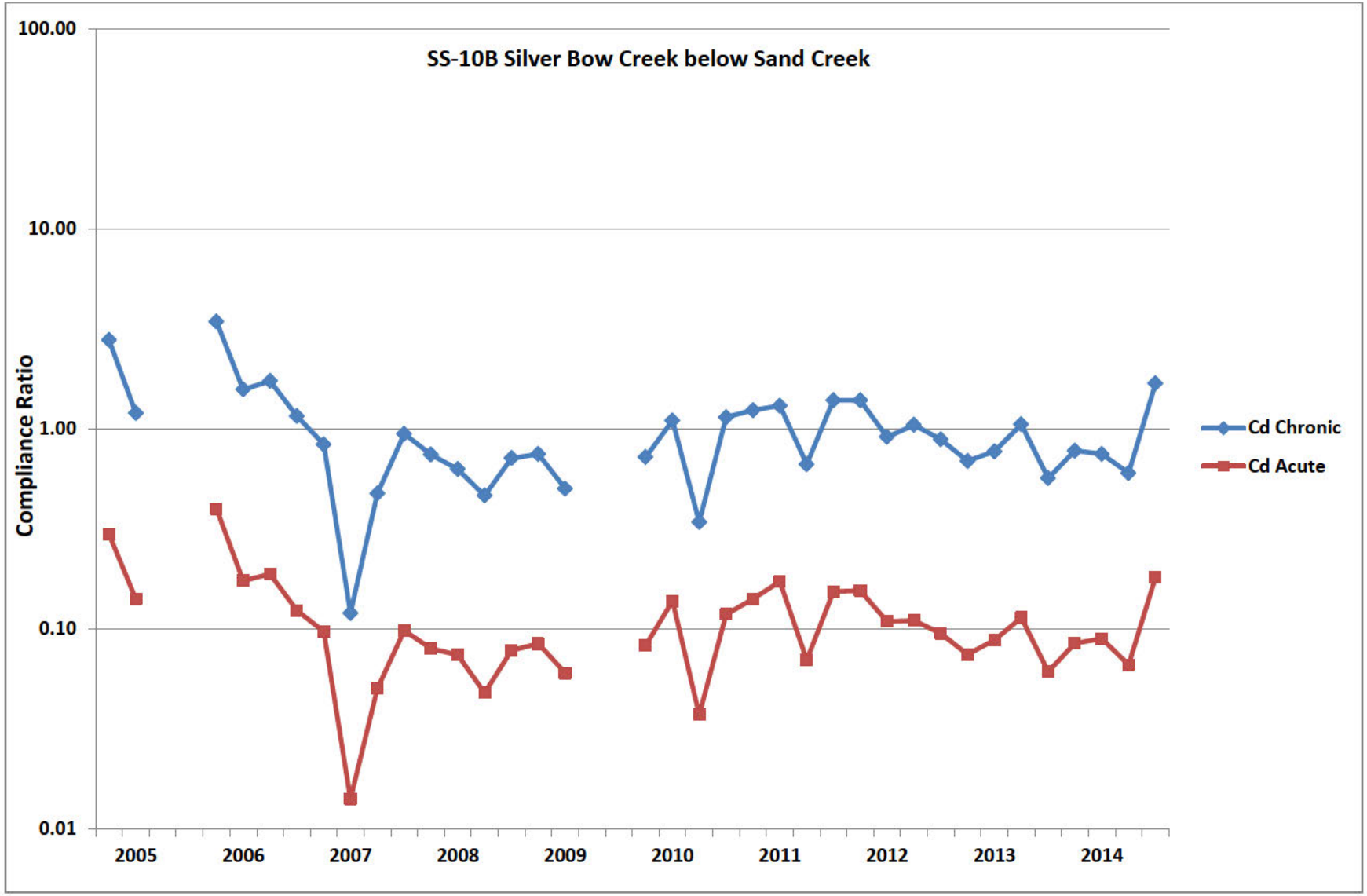

Figure 1-41. Total recoverable cadmium compliance ratios for Silver Bow Creek below Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

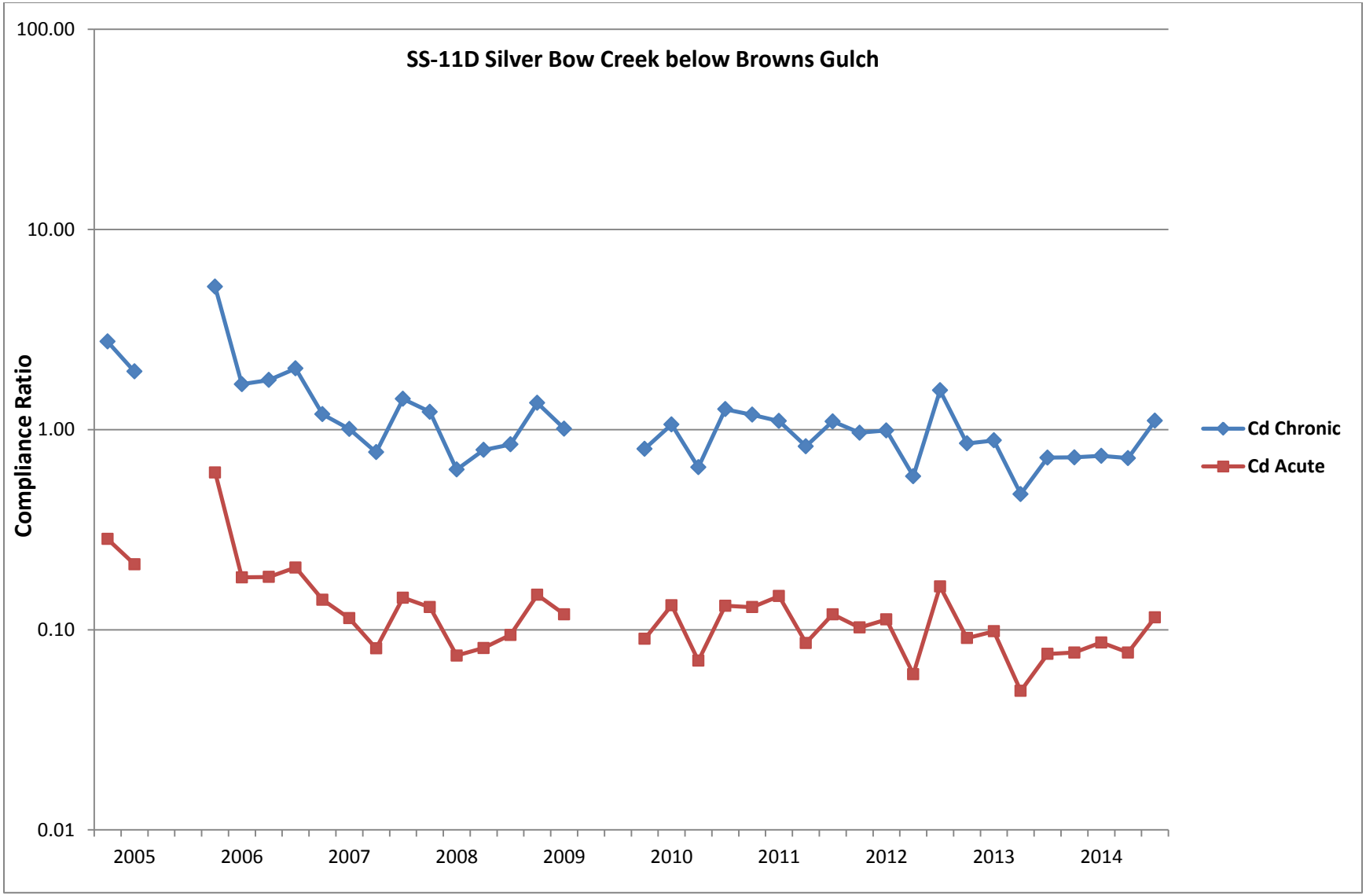

Figure 1-42. Total recoverable cadmium compliance ratios for Silver Bow Creek below Browns Gulch, 2005–2014. Compliance ratios computed from quarterly measurements.

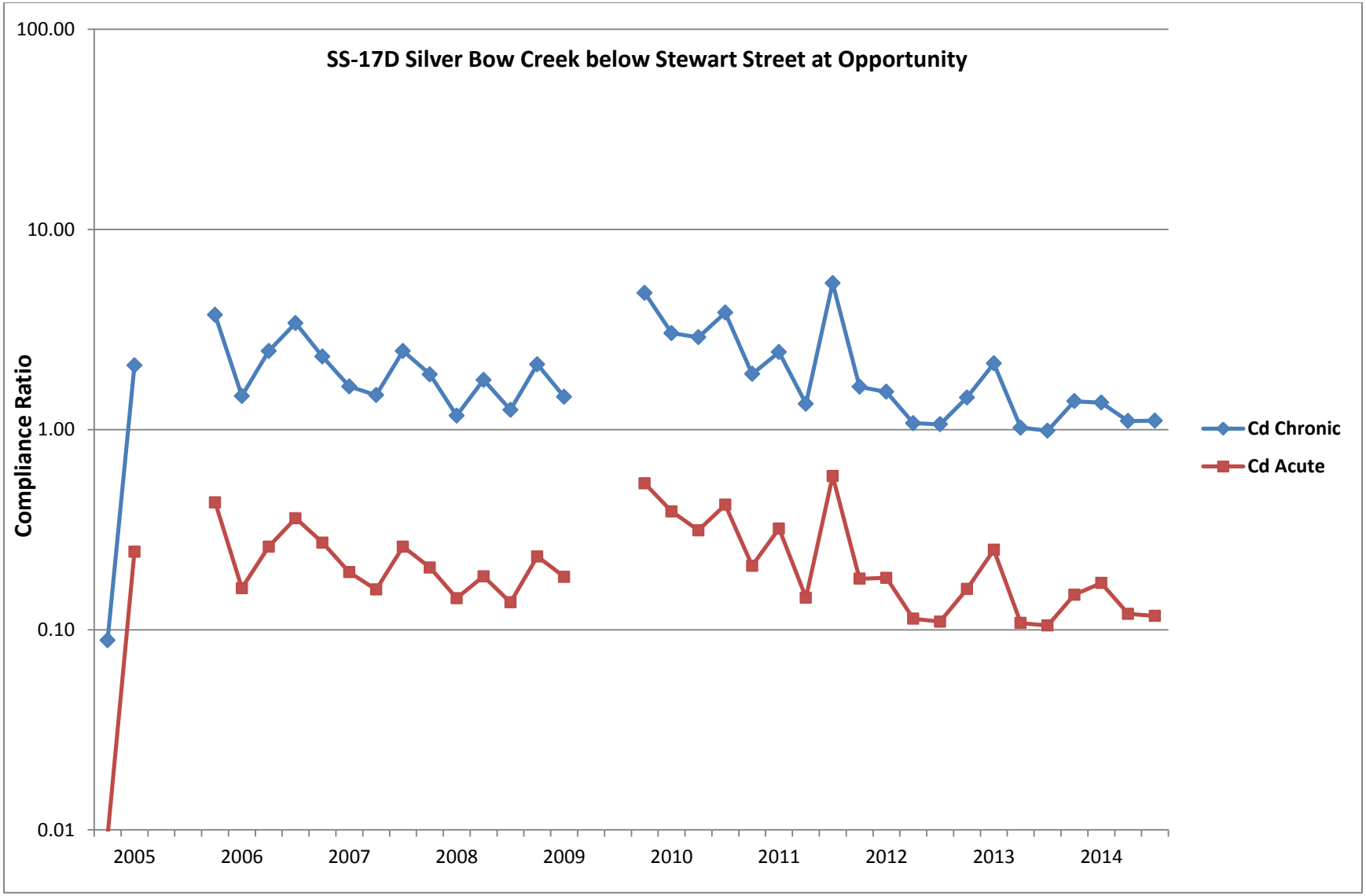

Figure 1-43. Total recoverable cadmium compliance ratios for Silver Bow Creek at Opportunity, 2005–2014. Compliance ratios computed from quarterly measurements.

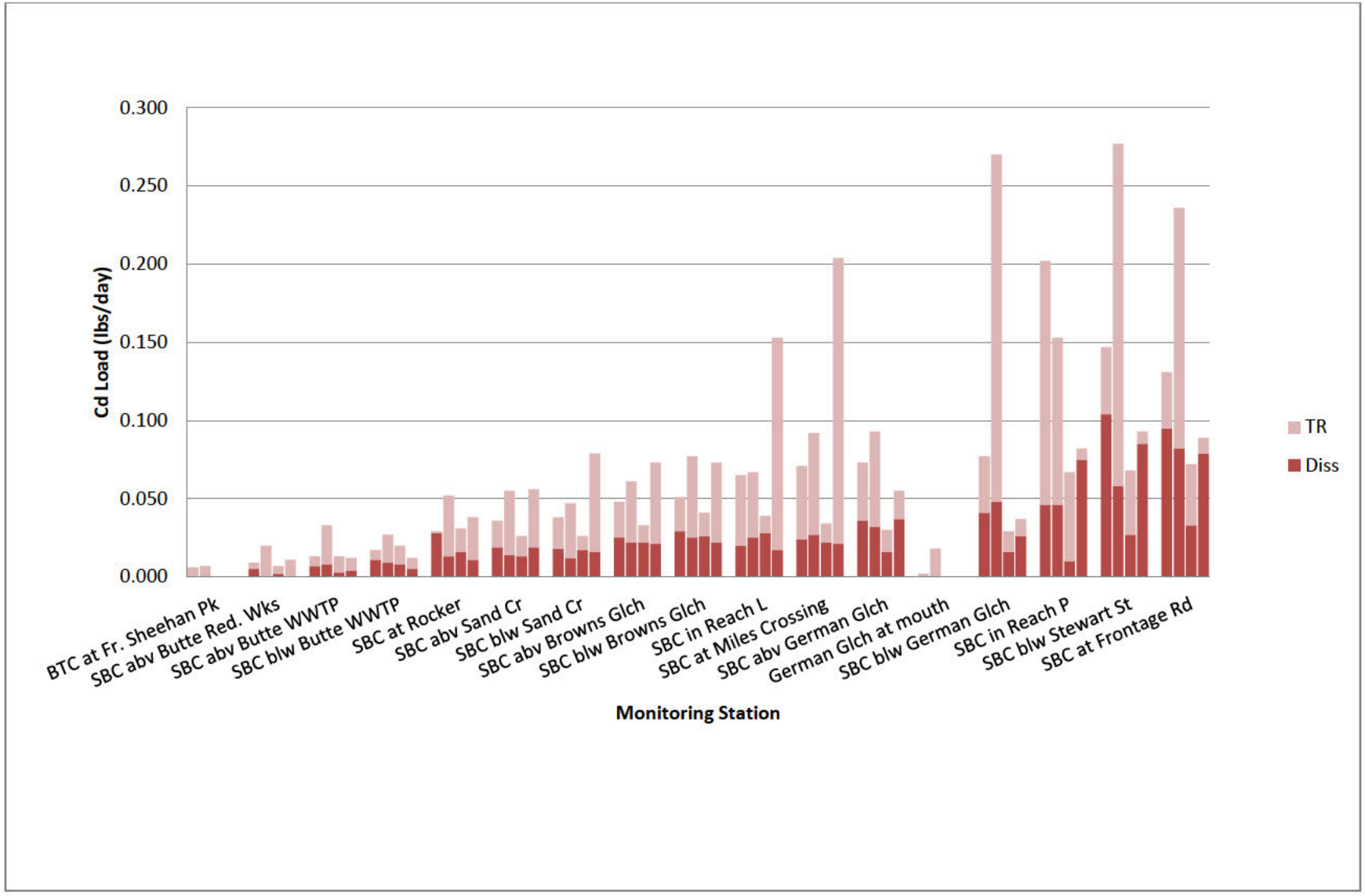

Figure 1-44. Total recoverable (TR) and dissolved (Diss) cadmium loads at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate no measureable load.

1.4.5.3 Copper

The spatial trend for copper concentrations in Silver Bow Creek during 2014 was similar to that for cadmium. During most quarterly monitoring events, there was a gradual upstream to downstream increase in total recoverable copper concentrations in Silver Bow Creek from the headwaters downstream to the lower-most site at Frontage Road. A slight decline in copper concentrations was observed below the German Gulch inflow at the station immediately below German Gulch, but this decrease was less apparent or absent at subsequent downstream monitoring stations [Figure 1-45]. The overall highest total recoverable copper concentrations in 2014 were observed in Silver Bow Creek at Miles Crossing and in Reach L in Q4, during elevated turbidity and total suspended sediment conditions. Concentrations were also high in Silver Bow Creek above and below Sand Creek, and above and below Browns Gulch during the Q4 monitoring event. Consistently low copper concentrations were observed in German Gulch near mouth and in Blacktail Creek at Father Sheehan Park. Dissolved copper concentrations showed less spatial and seasonal variation than total recoverable copper. Highest dissolved copper concentrations were observed below Stewart Street at Opportunity in Q1 and Q4. There was no clear seasonal pattern for occurrence of maximum copper concentrations in Silver Bow Creek, although highest concentrations at any given site were most likely to occur in either Q2 or Q4.

Copper was consistently present in both a dissolved state as well as in a sediment-associated form (total recoverable) at all Silver Bow Creek mainstem monitoring stations during all monitoring events [Figure 1-45]. Typically, the proportion of dissolved copper to total recoverable copper in Silver Bow Creek and Blacktail Creek was approximately one third to one half. There were some exceptions noted in the 2014 monitoring year, particularly in Q4 during the high turbidity event when total recoverable concentrations exceeded dissolved copper; the mean proportion of dissolved to total recoverable copper was 22% during that event at the affected six stations. Total recoverable copper concentrations at SSTOU monitoring stations in 2014 were generally within the range of concentrations measured in 2010-2013. However, copper concentrations were generally lower in Subarea 4 (e.g., below Stewart Street at Opportunity) in relation to the cleanup activities that have now been completed in the area.

Annual median total recoverable copper concentrations at selected Silver Bow Creek stations during 2005–2014 indicate that median concentrations have generally trended downward over the 10-year period examined [Figure 1-46]. However, median total recoverable copper concentrations increased slightly since 2009 at two stations; Silver Bow Creek above and below Sand Creek (particularly in 2011-2012). Silver Bow Creek below Stewart Street at Opportunity has shown relatively large annual decreases in total recoverable copper concentrations over the past five years.

Exceedances of the chronic and acute ALS for total recoverable copper were frequent throughout Silver Bow Creek from Rocker to Frontage Road in 2014 [Table 1-14]. All 12 Silver Bow Creek monitoring stations extending from Rocker to Frontage Road exceeded at least the chronic ALS during all quarterly monitoring events in 2014 with the exception of Silver Bow Creek below German Gulch in Q4. Upstream stations, including Blacktail Creek at Father

Sheehan Park, Silver Bow Creek above the Butte Reduction Works, and Silver Bow Creek above and below the Butte WWTP, exceeded either the chronic (Blacktail Creek) or the acute ALS (the three Silver Bow Creek stations) during the Q2 monitoring event but not during the other three quarters. In contrast, the German Gulch monitoring station showed no exceedances of either ALS in 2014. The frequency of copper chronic ALS exceedances in 2014 (51 of 68 site measurements exceeded the chronic ALS) was higher than in 2013 (39 of 64 exceedances), 2012 (37 of 56 exceedances), and 2011 (38 of 56 exceedances), but slightly lower than in 2010 (44 of 56 exceedances). A total of 30 exceedances of the acute ALS were observed in 68 individual site measurements in 2014, compared to 21 exceedances in 64 site measurements in 2013, and 22 exceedances in 56 site measurements in 2012.

Figure 1-47 through Figure 1-52 present compliance ratios for total recoverable copper for Silver Bow Creek stations below the Butte WWTP, at Rocker, above and below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity. Aquatic life compliance ratios for copper appear to have declined during the 2005-2008 period at most of the six SSTOU monitoring stations that were examined. Compliance ratios appear to have stabilized at most of those sites since 2008, with one exception. The Silver Bow Creek below Stewart Street at Opportunity site has continued to show declining compliance ratios over the past several years [Figure 1-52].

Load estimates for total recoverable and dissolved copper for 2014 were calculated for all of the 17 monitoring stations, and loading patterns for copper were similar to cadmium [Figure 1-53]. Copper loads gradually increased from Blacktail Creek at Father Sheehan Park to Silver Bow Creek at Frontage Road during most quarterly monitoring events [Figure 1-53]. Largest loads occurred at the downstream-most monitoring station at Frontage Road in Q2. High total recoverable copper loads were also measured in Silver Bow Creek at Miles Crossing and in Reach L during the high turbidity event in Q4. Largest inter-site increases in copper loading were noted from below Browns Gulch to the site in Reach L in Q4 (6.44 lbs/day increase), and from below Stewart Street at Opportunity to Frontage Road in Q2 (5.95 lbs/day increase). Overall, total recoverable copper loads calculated for SSTOU monitoring stations in 2014 were similar to loads computed for 2012-2013.

Table 1-14. Total recoverable copper concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.005	0.009	0.003	0.003
SS-05A	Silver Bow Creek above Butte Reduction Works	0.007	0.024	0.007	0.012
SS-06G	Silver Bow Creek above WWTP	0.008	0.025	0.010	0.012
SS-07	Silver Bow Creek below WWTP	0.012	0.021	0.012	0.012
SS-08	Silver Bow Creek at Rocker	0.016	0.029	0.017	0.025
SS-10A	Silver Bow Creek above Sand Creek	0.024	0.026	0.022	0.043
SS-10B	Silver Bow Creek below Sand Creek	0.025	0.026	0.023	0.040
SS-11C	Silver Bow Creek above Browns Gulch	0.022	0.024	0.023	0.040
SS-11D	Silver Bow Creek below Browns Gulch	0.020	0.020	0.022	0.039
SS-13	Silver Bow Creek in Reach L	0.024	0.020	0.020	0.071
SS-14	Silver Bow Creek at Miles Crossing	0.024	0.022	0.018	0.098
SS-15A	Silver Bow Creek above German Gulch	0.030	0.022	0.019	0.018
SS-15G	German Gulch near confluence	0.001	0.003	0.001	ND
SS-15B	Silver Bow Creek below German Gulch	0.021	0.011	0.018	0.012
SS-16	Silver Bow Creek in Reach P near Fairmont	0.024	0.016	0.034	0.023
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.031	0.023	0.030	0.023
SS-19	Silver Bow Creek at Frontage Road	0.028	0.025	0.027	0.022

ND Not detected at analytical reporting limit.

Exceeds the chronic aquatic life standard [MDEQ, 2012a].

Exceeds the acute aquatic life standard [MDEQ, 2012a].

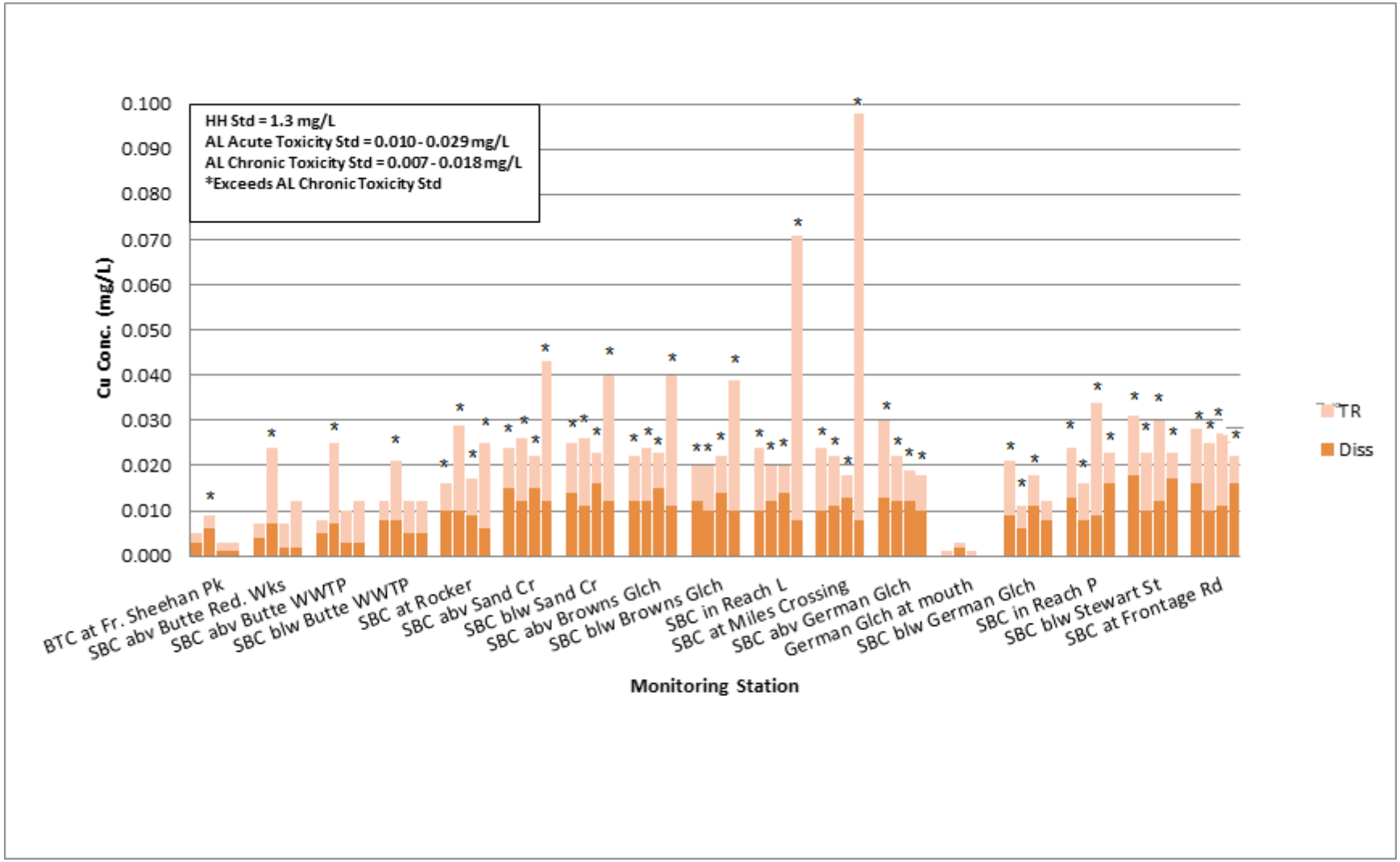

Figure 1-45. Total recoverable (TR) and dissolved (Diss) copper concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. Human health (HH Std) and aquatic life toxicity (AL Acute/Chronic Toxicity Std) standards for total recoverable copper are shown for reference.

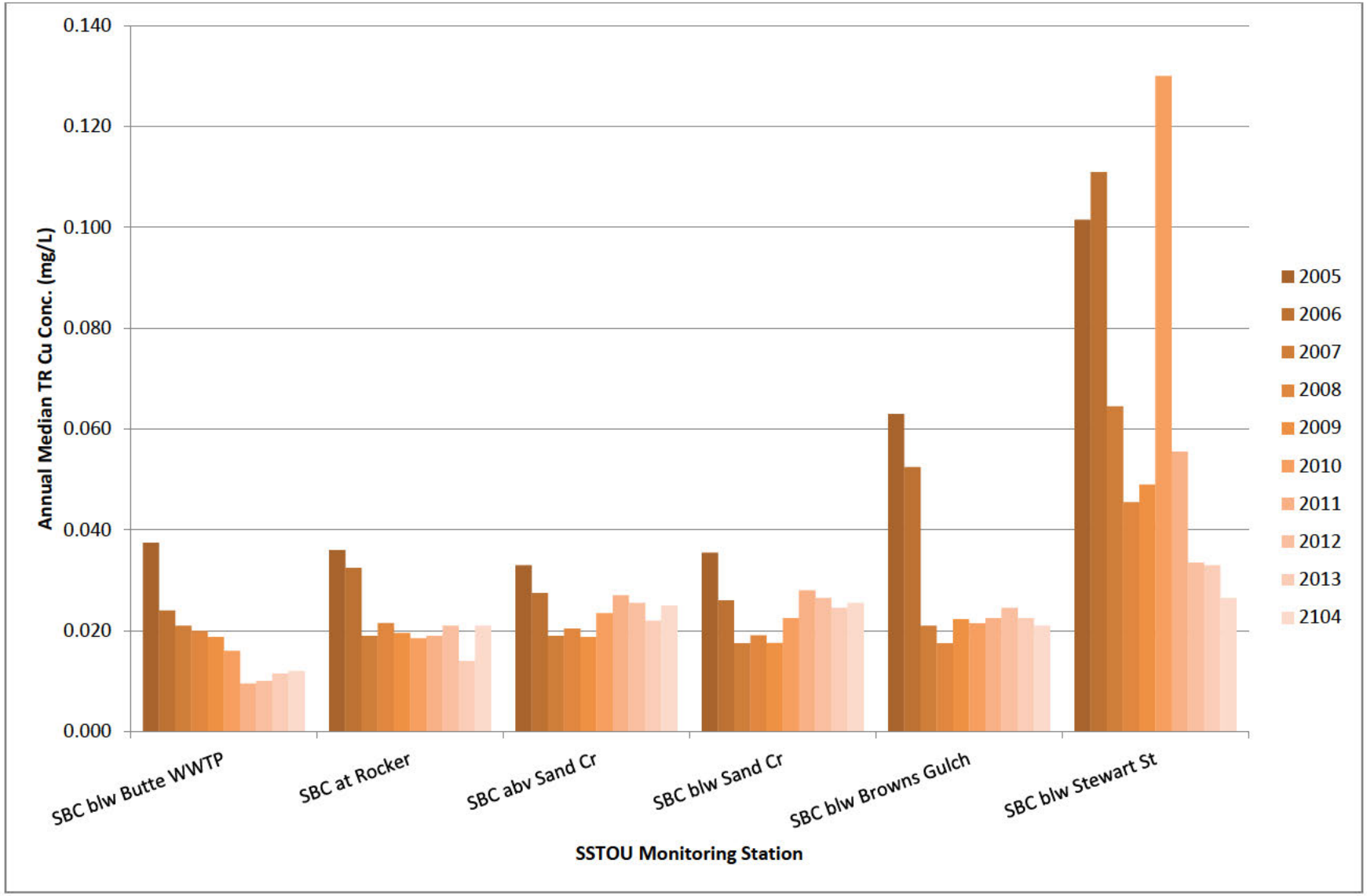

Figure 1-46. Annual median total recoverable copper concentrations at selected Streamside Tailings Operable Unit monitoring stations, 2005–2014.

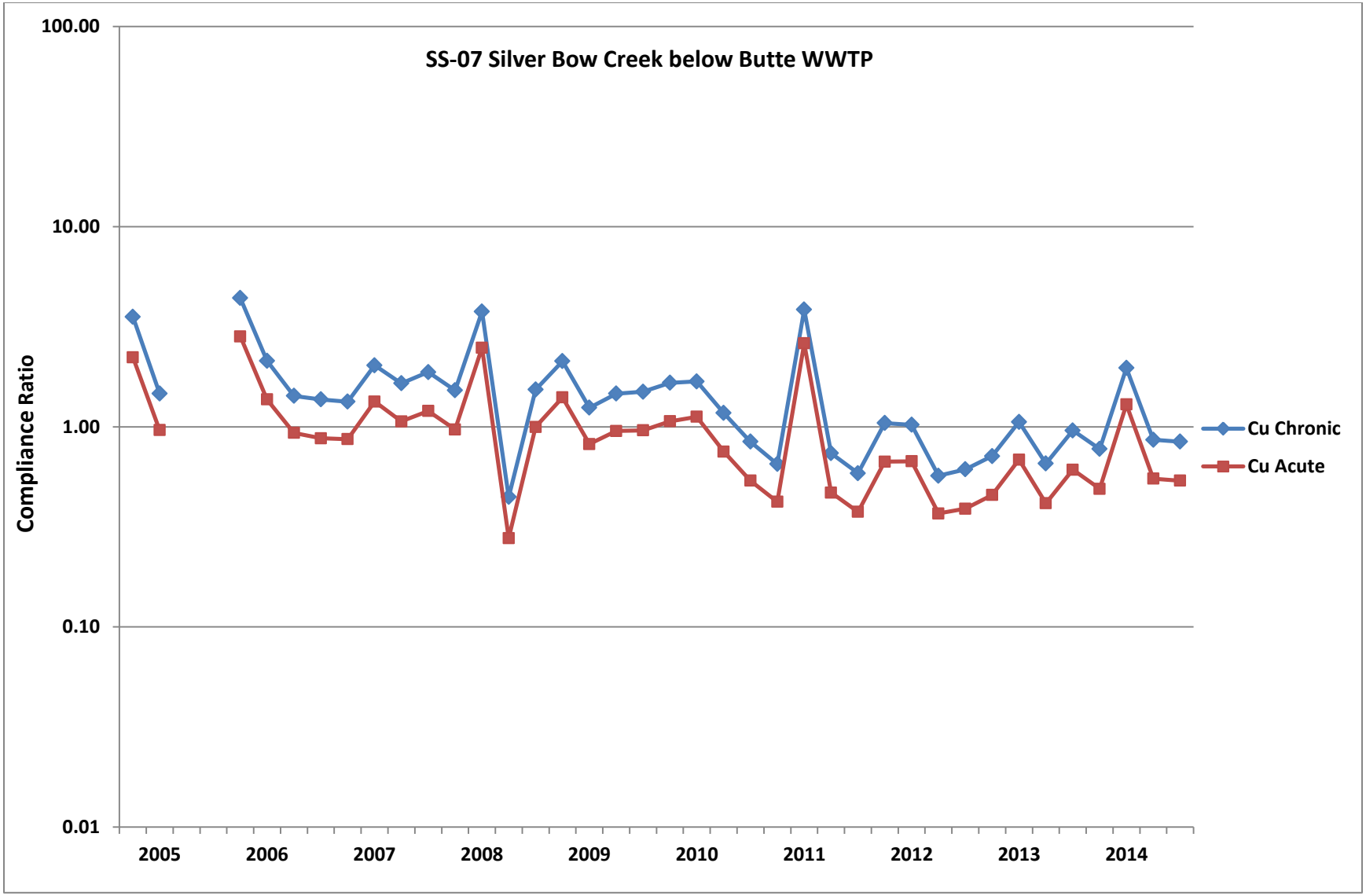

Figure 1-47. Total recoverable copper compliance ratios for Silver Bow Creek below the Butte wastewater treatment plant discharge, 2005–2014. Compliance ratios computed from quarterly measurements.

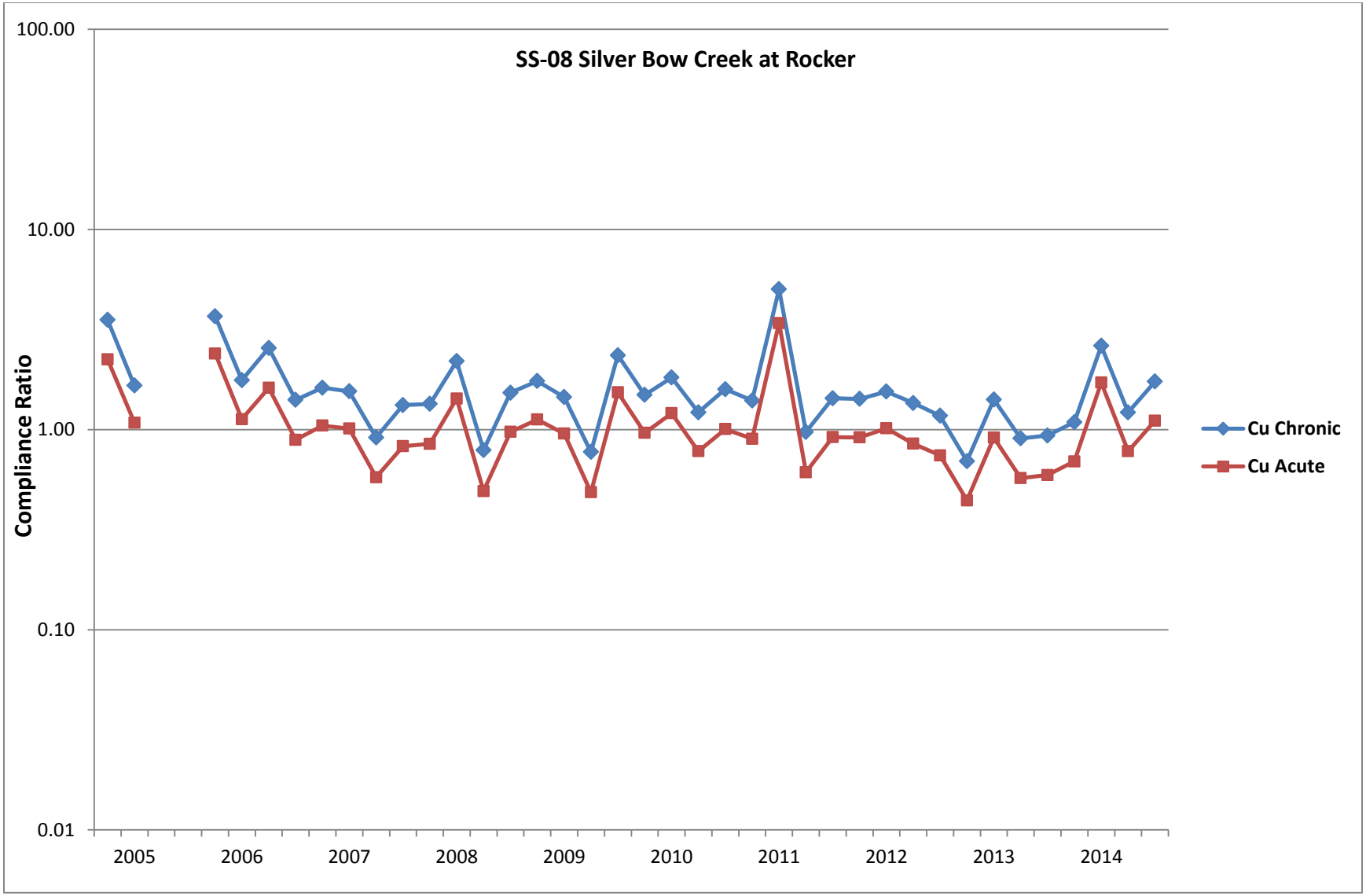

Figure 1-48. Total recoverable copper compliance ratios for Silver Bow Creek at Rocker, 2005–2014. Compliance ratios computed from quarterly measurements.

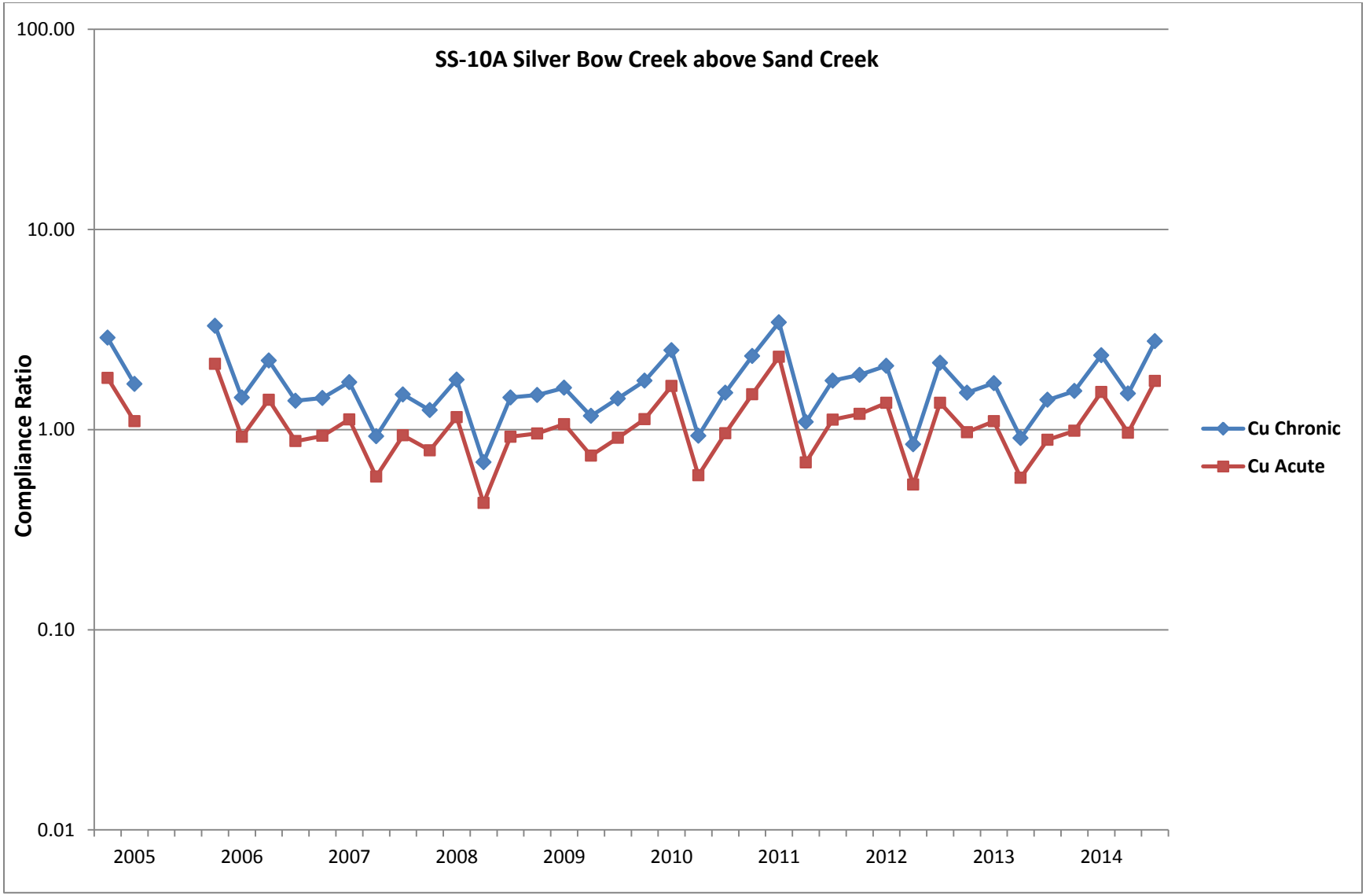

Figure 1-49. Total recoverable copper compliance ratios for Silver Bow Creek above Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

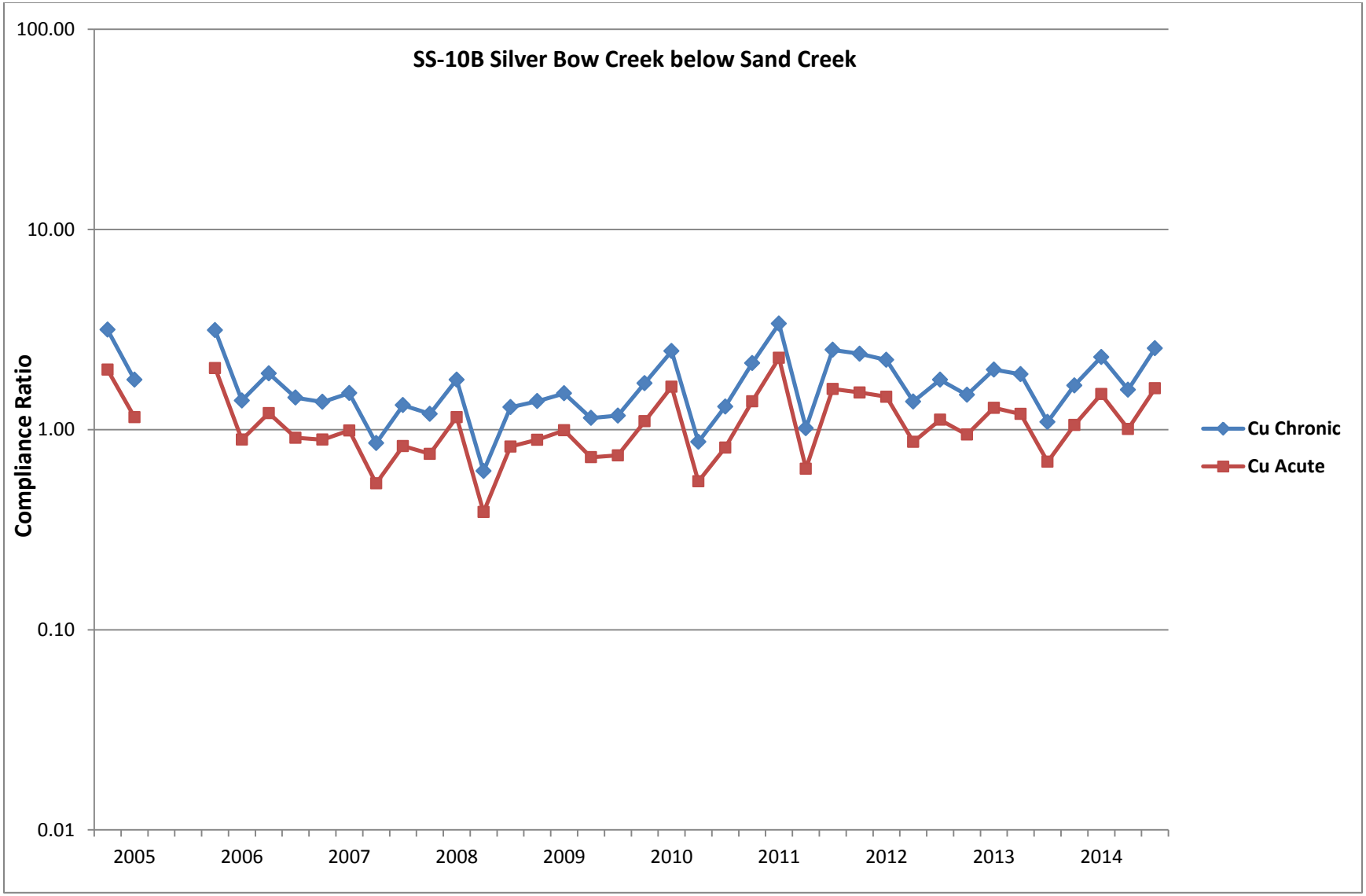

Figure 1-50. Total recoverable copper compliance ratios for Silver Bow Creek below Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

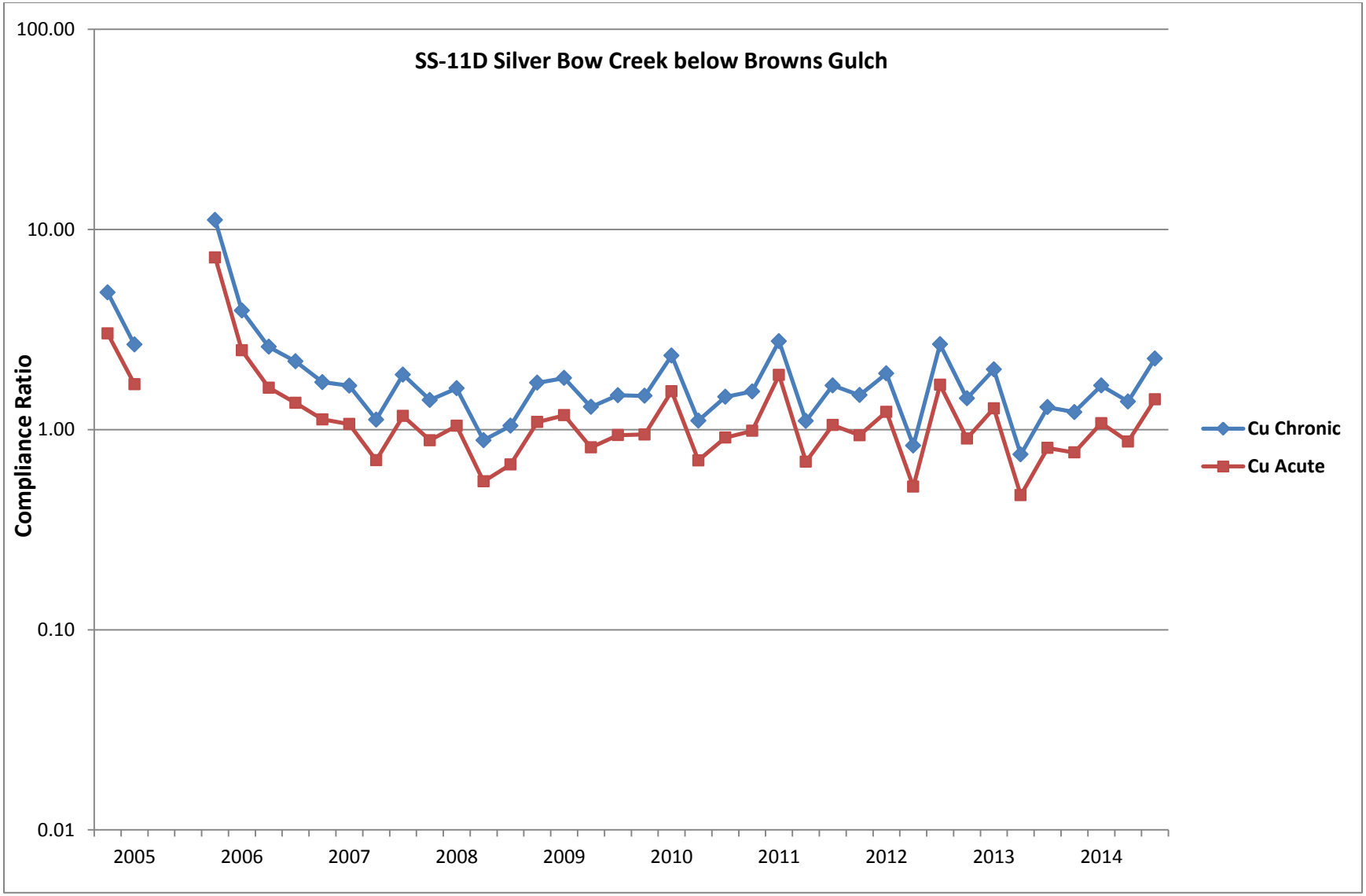

Figure 1-51. Total recoverable copper compliance ratios for Silver Bow Creek below Browns Gulch, 2005–2014. Compliance ratios computed from quarterly measurements.

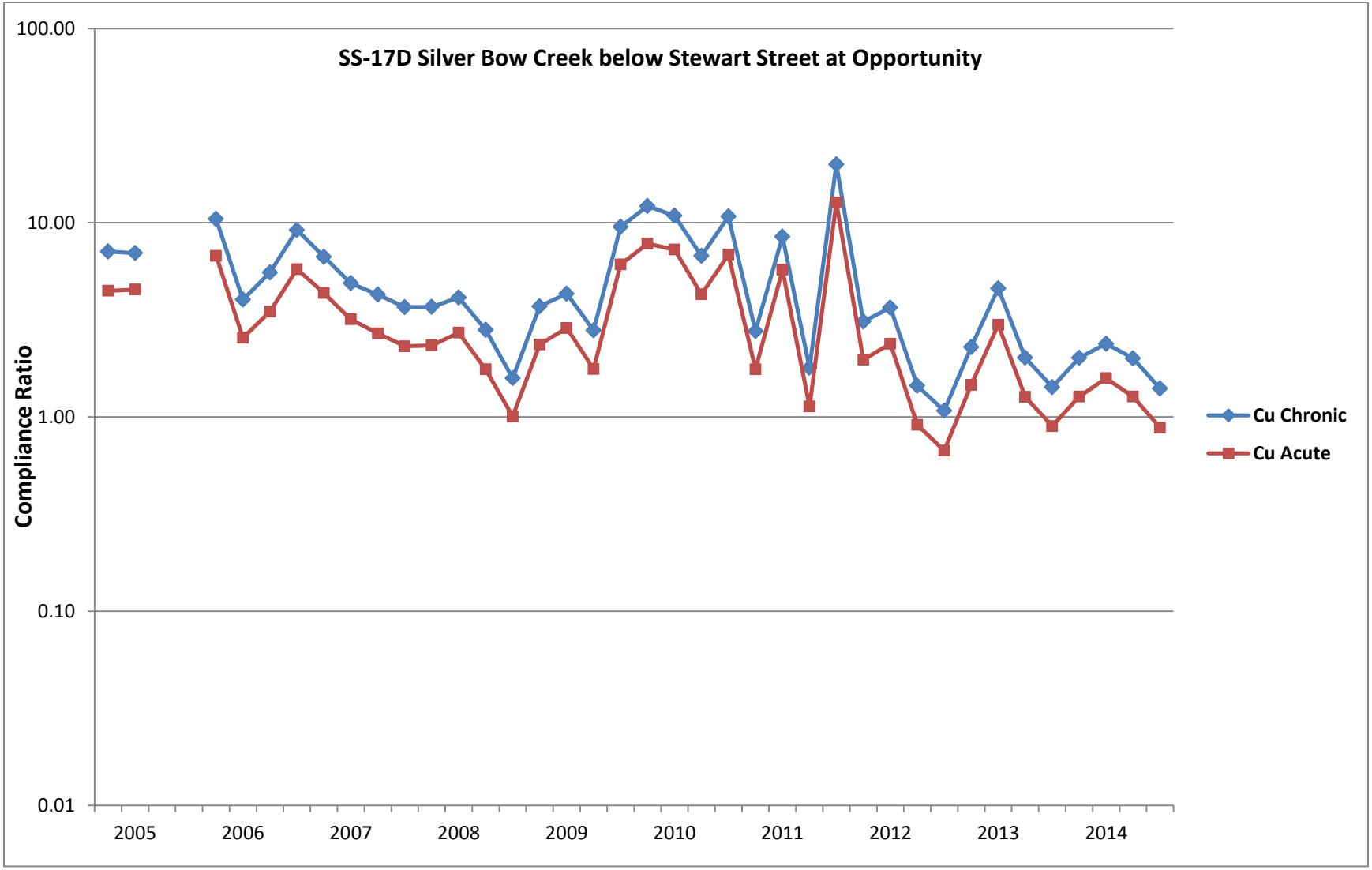

Figure 1-52. Total recoverable copper compliance ratios for Silver Bow Creek below Stewart Street at Opportunity, 2005–2014. Compliance ratios computed from quarterly measurements.

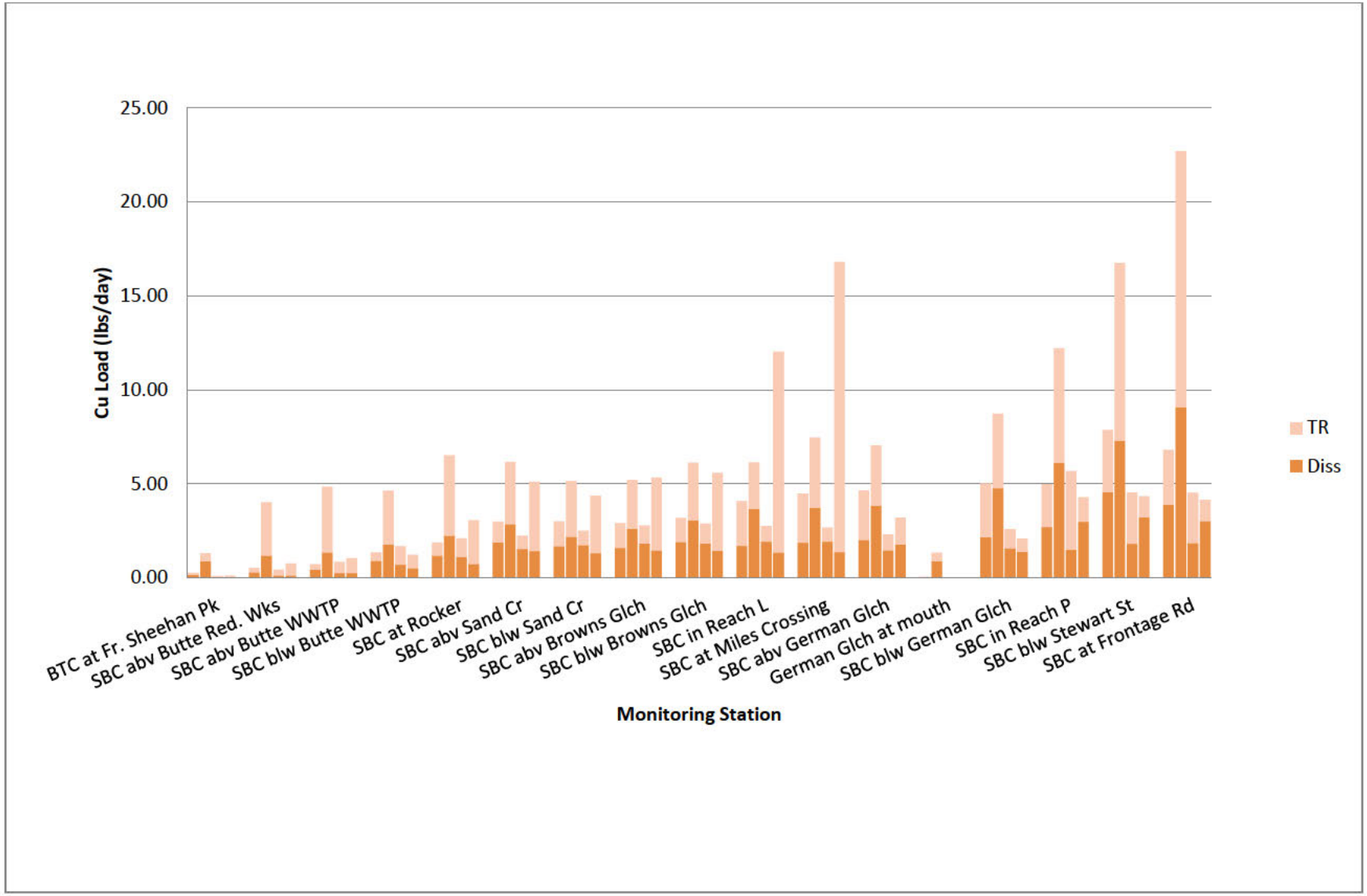

Figure 1-53. Total recoverable (TR) and dissolved (Diss) copper loads at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate no measureable loads.

1.4.5.4 Lead

The spatial pattern for lead concentrations at SSTOU monitoring stations during 2014 was not particularly distinct [Figure 1-54]. Total recoverable lead concentrations were usually in the 0.002-0.006 mg/L range at most of the Silver Bow Creek monitoring stations extending from above the Butte Reduction Works to Frontage Road. Aside from these relatively low background concentrations, there were periodic seasonal concentration spikes at selected stations. Most notably, these occurred in Silver Bow Creek at Miles Crossing and in Reach L in Q4 along with high turbidity. Highest lead concentrations at any given station were observed in Q4 (8 of 17 sites) or Q2 (7 of 17 sites). The overall highest total recoverable lead concentrations in 2014 were those measured at Miles Crossing and in Reach L in Q4, with concentrations of 0.0178 mg/L and 0.0120 mg/L, respectively. Lead concentrations were consistently low in Blacktail Creek at Father Sheehan Park and in German Gulch near mouth. Dissolved lead concentrations were consistently low, and frequently below the analytical reporting limit [Figure 1-54]. Most lead in Silver Bow Creek was present in the sediment associated form (total recoverable).

Total recoverable and dissolved lead concentrations during 2014 were within the range of concentrations measured from 2010-2013. Median concentrations appeared to be more or less static since 2005 below the Butte WWTP, at Rocker, and above and below Sand Creek. Median total recoverable lead concentrations in Silver Bow Creek below Browns Gulch have declined markedly since 2005, while concentrations below Stewart Street at Opportunity have decreased in each year since 2010 in conjunction with the cleanup activities within that segment of the creek [Figure 1-55].

Exceedances of the total recoverable lead ALS or HHSWS occurred most commonly during Q2, when five of 17 sites showed exceedances of the chronic ALS [Table 1-15]. Two sites showed exceedances of the chronic ALS in Q4 and one of those sites also exceeded the HHSWS. These excursions occurred during the high turbidity conditions encountered at several sites in Q4. No exceedances of either the ALS or the HHSWS were detected during monitoring in either of Q1 or Q3 2014. No exceedances of the ALS or HHSWS were observed in Blacktail Creek at Father Sheehan Park, in German Gulch at its mouth, or at seven of the 15 mainstem Silver Bow Creek monitoring stations.

Overall, performance goal exceedances for lead in 2014 were less frequent than during prior monitoring years. Seven of 68 site measurements exceeded the chronic ALS in 2014 and one site measurement exceeded the HHSWS. By comparison, nine of 64 site measurements exceeded the chronic ALS in 2013 and one site measurement exceeded the HHSWS. In 2012, nine of 56 station measurements exceeded the chronic ALS and one site measurement exceeded the HHSWS, compared to 14 of 56 measurements in 2011 (including three HHSWS exceedances), and 17 of 56 measurements in 2010 (including nine HHSWS exceedances).

Figure 1-56 through Figure 1-61 present compliance ratios for total recoverable lead for Silver Bow Creek stations below the Butte WWTP, at Rocker, above and below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity. Temporal trends in ALS compliance ratios for total recoverable lead were variable over the 2005–2014 period, with more or less static trends in recent years at most stations. The only station of the six stations

examined that appeared to have an upward or downward trend was Silver Bow Creek below Stewart Street at Opportunity, which has had progressively lower compliance ratios since 2010 [Figure 1-61]. The station at Opportunity, until recently, has had total recoverable lead chronic ALS compliance ratios as high as 9.62, compared to a high of 1.2 in (Q2) 2014.

Total recoverable lead loads in Silver Bow Creek were generally small and only slightly variable from site to site during most monitoring events in 2014. Exceptions were the Q2 spring runoff monitoring event when loading increased markedly in the segment of Silver Bow Creek from below German Gulch to the Frontage Road [Figure 1-62]. Lead loads were also atypically high in Silver Bow Creek at Miles Crossing and at the site in Reach L during the high turbidity event in Q4 2014. The largest lead loads at 13 of the 17 monitoring sites during 2014 monitoring occurred in Q2 during spring runoff conditions. Overall, total recoverable lead loads calculated for SSTOU monitoring stations in 2014 were within the range of measurements for 2012-2013.

Table 1-15. Total recoverable lead concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.0005	0.0008	0.0004	0.0005
SS-05A	Silver Bow Creek above Butte Reduction Works	0.0013	0.0045	0.0022	0.0039
SS-06G	Silver Bow Creek above WWTP	0.0014	0.0058	0.0032	0.0030
SS-07	Silver Bow Creek below WWTP	0.0014	0.0037	0.0026	0.0021
SS-08	Silver Bow Creek at Rocker	0.0023	0.0059	0.0029	0.0059
SS-10A	Silver Bow Creek above Sand Creek	0.0024	0.0038	0.0014	0.0065
SS-10B	Silver Bow Creek below Sand Creek	0.0024	0.0041	0.0014	0.0057
SS-11C	Silver Bow Creek above Browns Gulch	0.0018	0.0029	0.0012	0.0054
SS-11D	Silver Bow Creek below Browns Gulch	0.0016	0.0027	0.0011	0.0054
SS-13	Silver Bow Creek in Reach L	0.0034	0.0031	0.0011	0.0120
SS-14	Silver Bow Creek at Miles Crossing	0.0031	0.0037	0.0011	0.0178
SS-15A	Silver Bow Creek above German Gulch	0.0043	0.0033	0.0015	0.0015
SS-15G	German Gulch near confluence	ND	0.0004	ND	ND
SS-15B	Silver Bow Creek below German Gulch	0.0028	0.0016	0.0016	0.0009
SS-16	Silver Bow Creek in Reach P near Fairmont	0.0032	0.0032	0.0063	0.0014
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.0033	0.0040	0.0043	0.0012
SS-19	Silver Bow Creek at Frontage Road	0.0030	0.0042	0.0038	0.0011

ND Not detected at analytical reporting limit.

Exceeds the chronic aquatic life standard [MDEQ, 2012a].

Exceeds the human health surface water standard [MDEQ, 2012a].

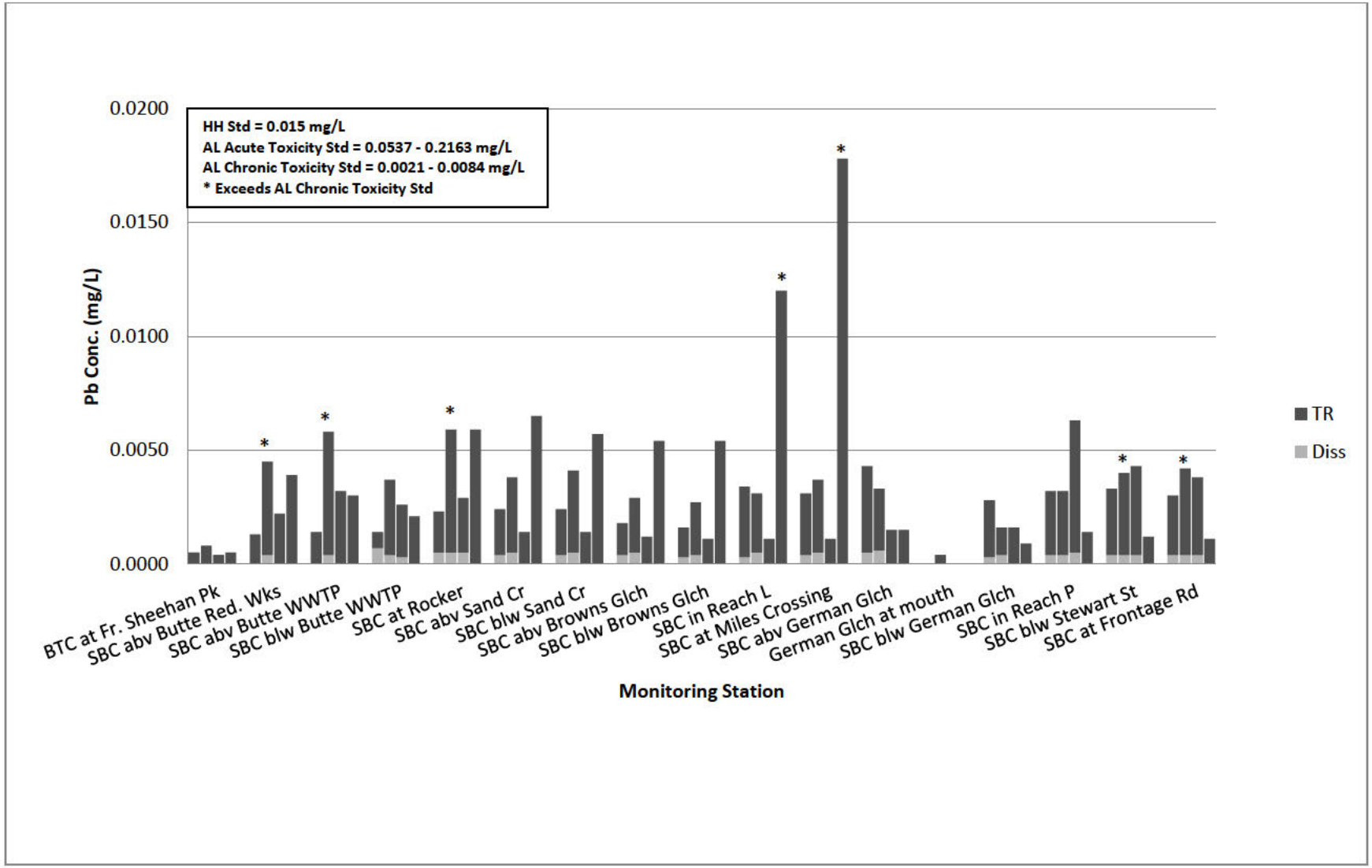

Figure 1-54. Total recoverable (TR) and dissolved (Diss) lead concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. Human Health (HH Std) and aquatic life toxicity (AL Acute/Chronic Toxicity Std) standards for total recoverable lead are shown for reference.

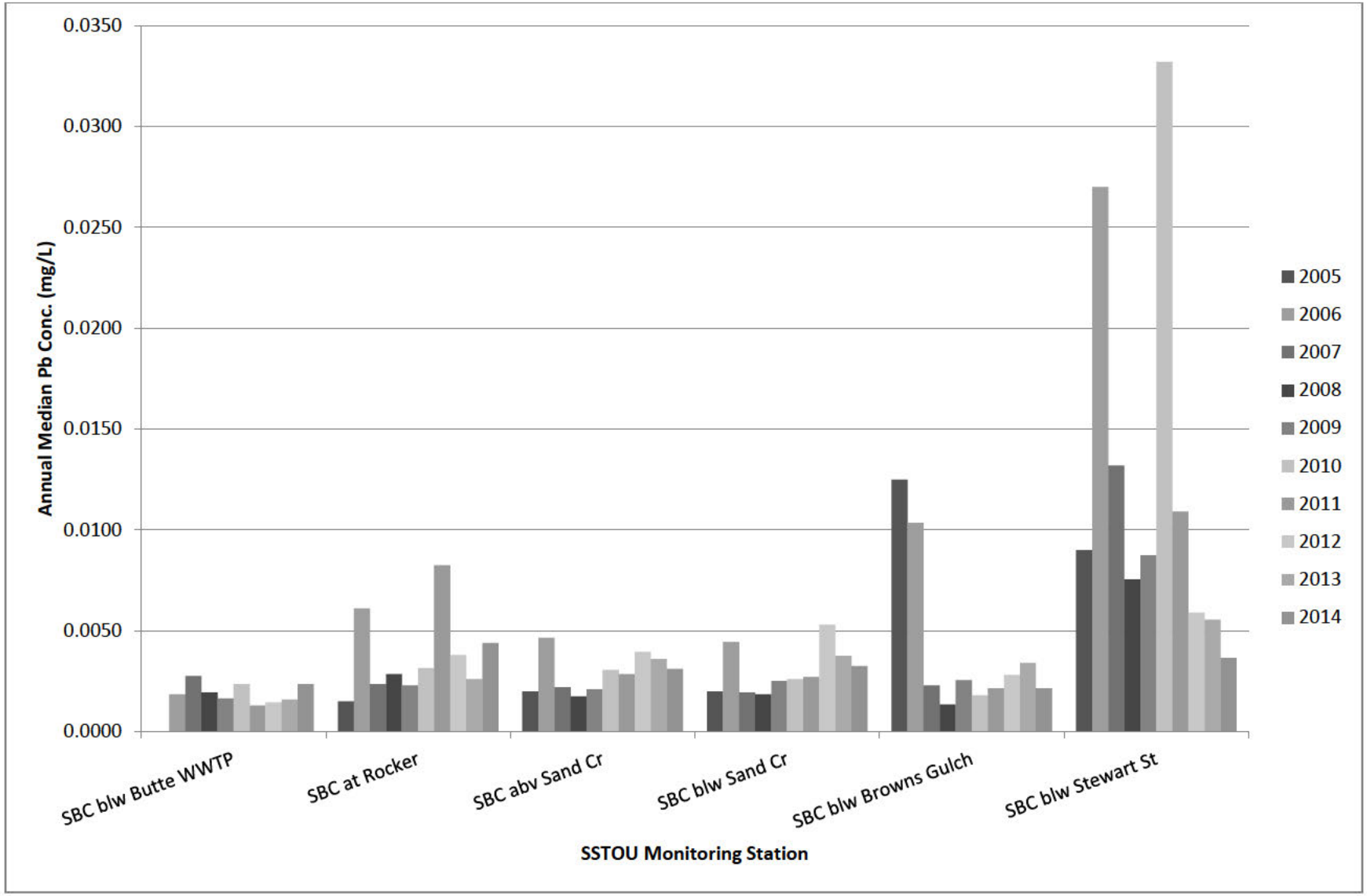

Figure 1-55. Annual median total recoverable lead concentrations at selected Streamside Tailings Operable Unit monitoring stations, 2005–2014.

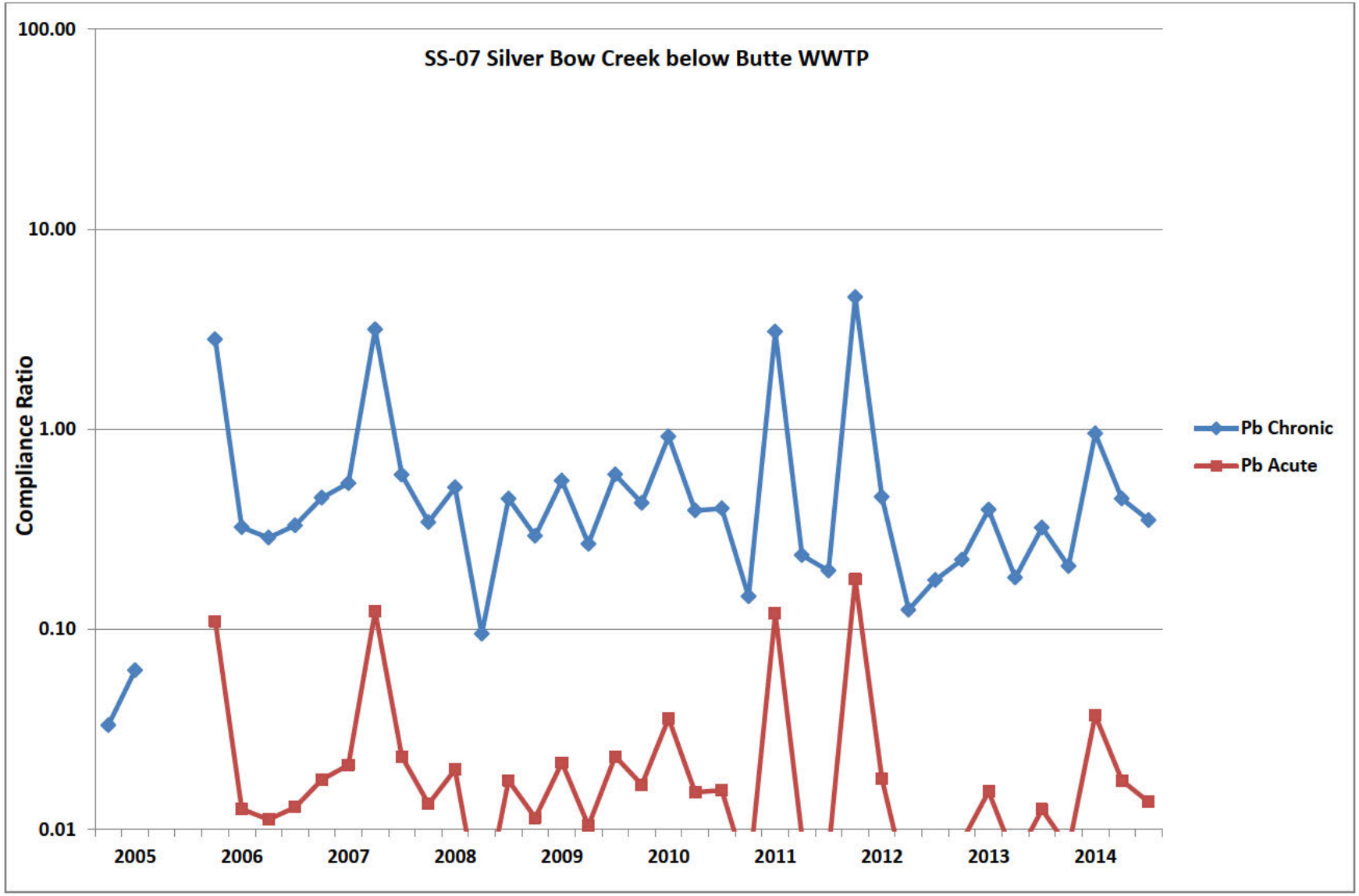

Figure 1-56. Total recoverable lead compliance ratios for Silver Bow Creek below the Butte wastewater treatment plant discharge, 2005–2014. Compliance ratios computed from quarterly measurements.

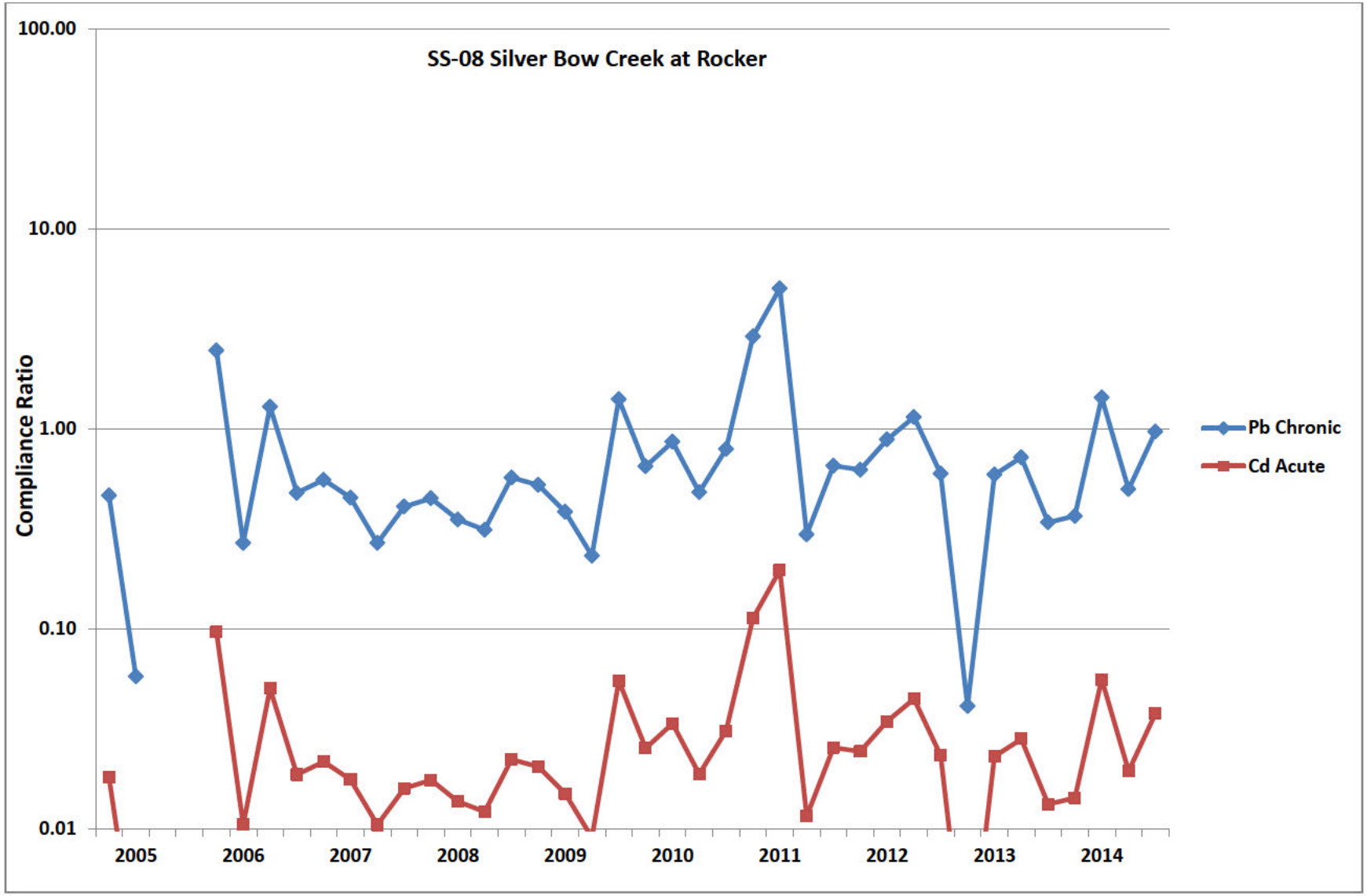

Figure 1-57. Total recoverable lead compliance ratios for Silver Bow Creek at Rocker, 2005–2014. Compliance ratios computed from quarterly measurements.

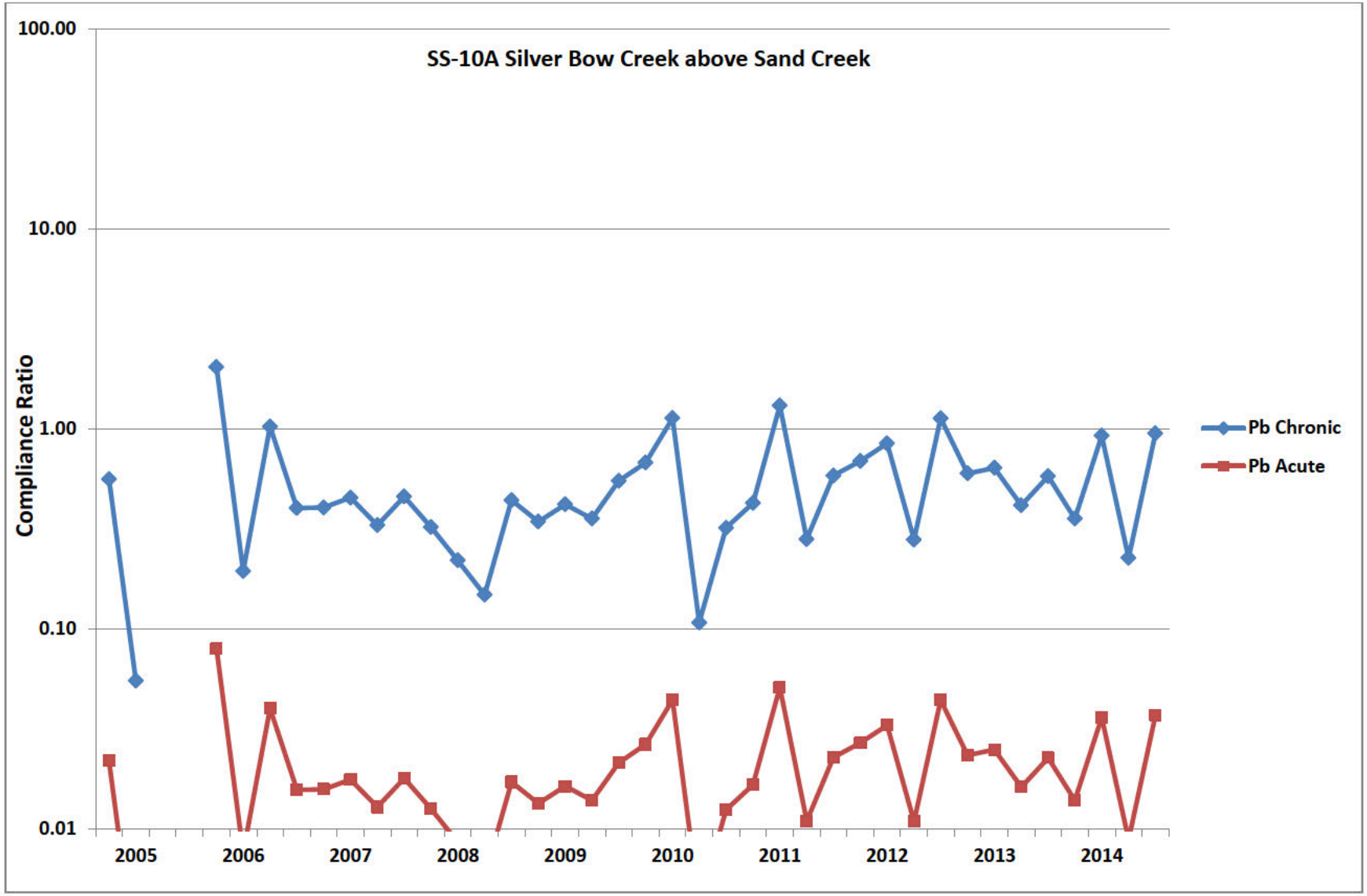

Figure 1-58. Total recoverable lead compliance ratios for Silver Bow Creek above Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

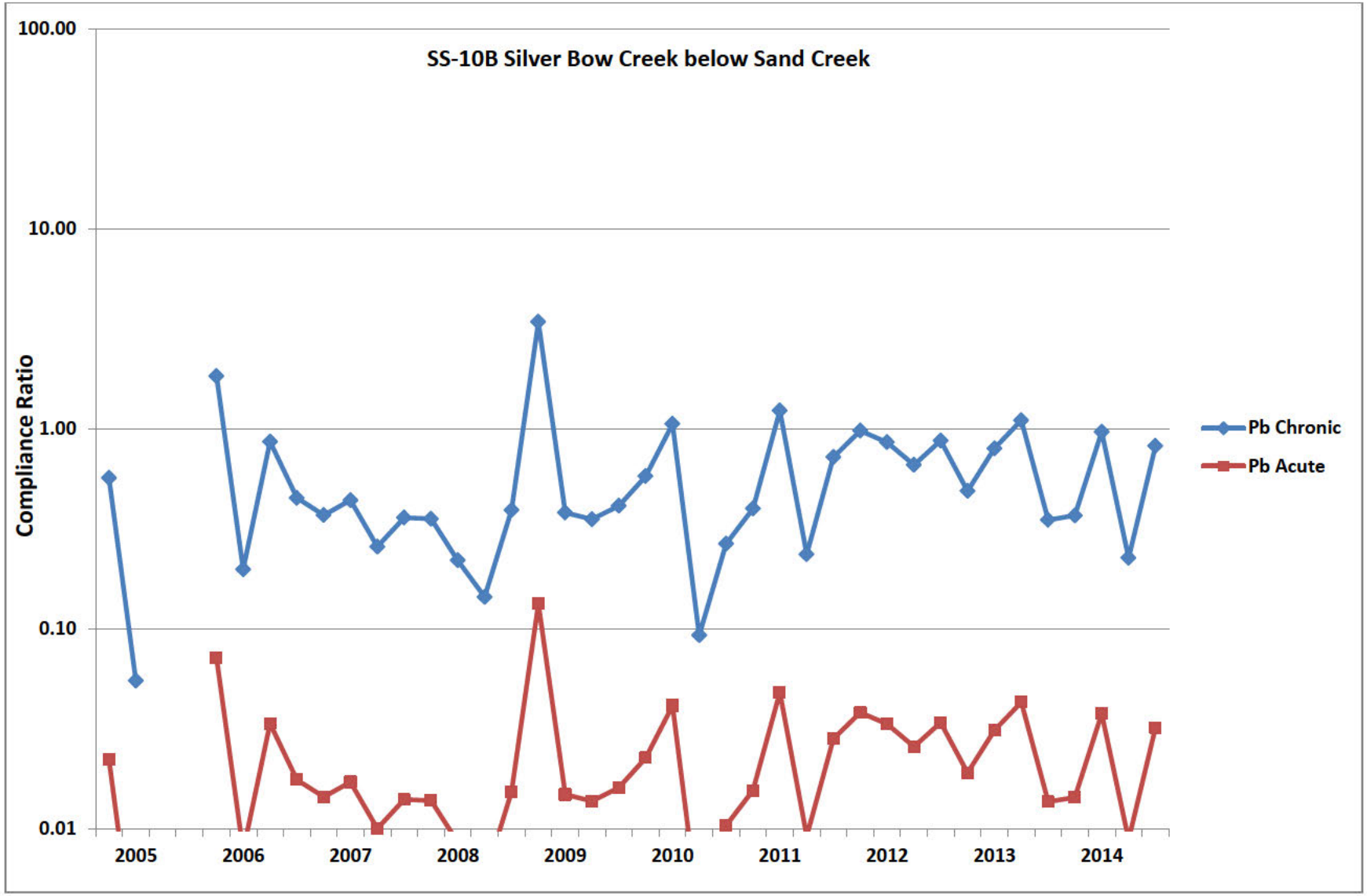

Figure 1-59. Total recoverable lead compliance ratios for Silver Bow Creek below Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

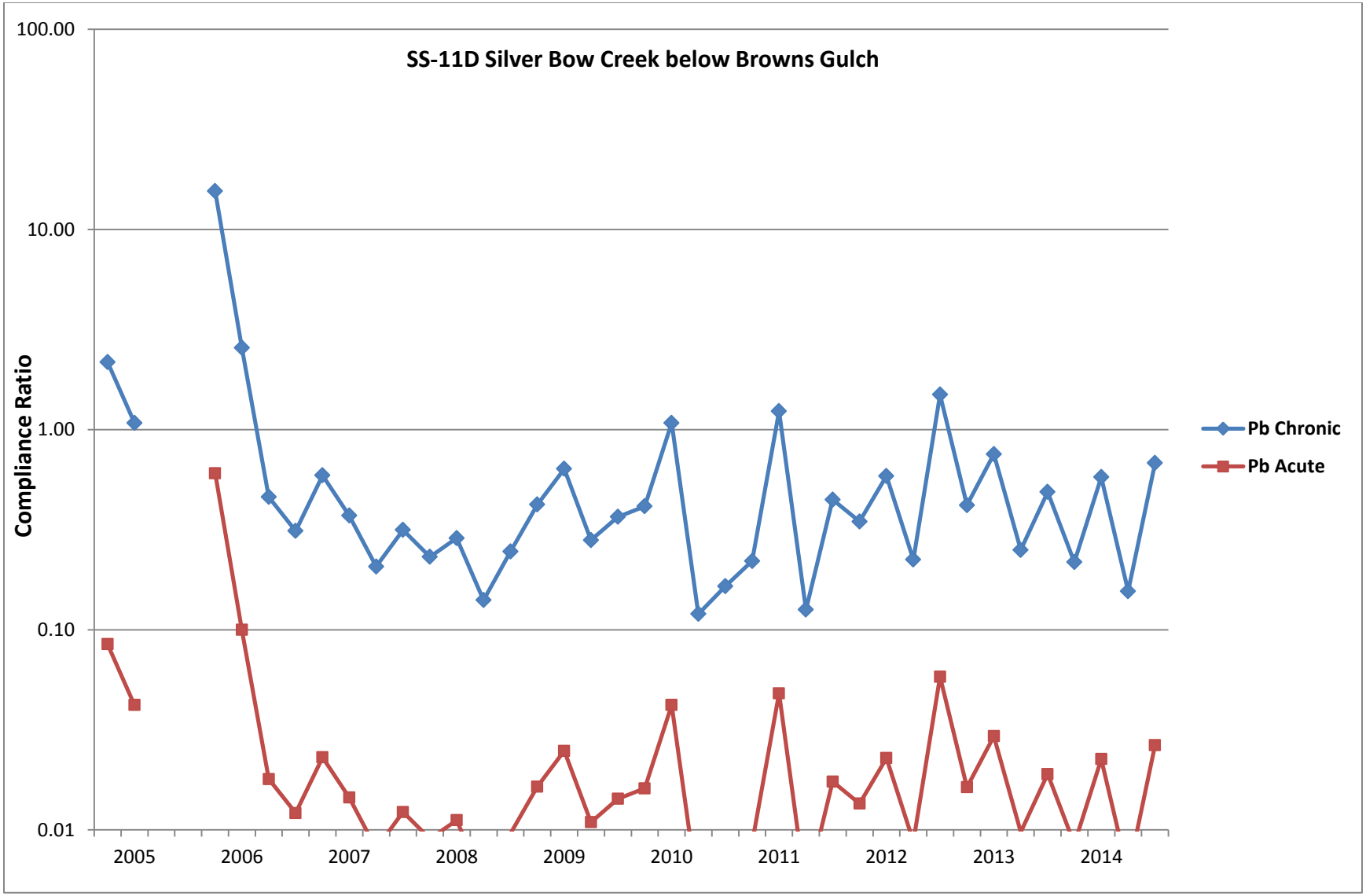

Figure 1-60. Total recoverable lead compliance ratios for Silver Bow Creek below Browns Gulch, 2005–2014. Compliance ratios computed from quarterly measurements.

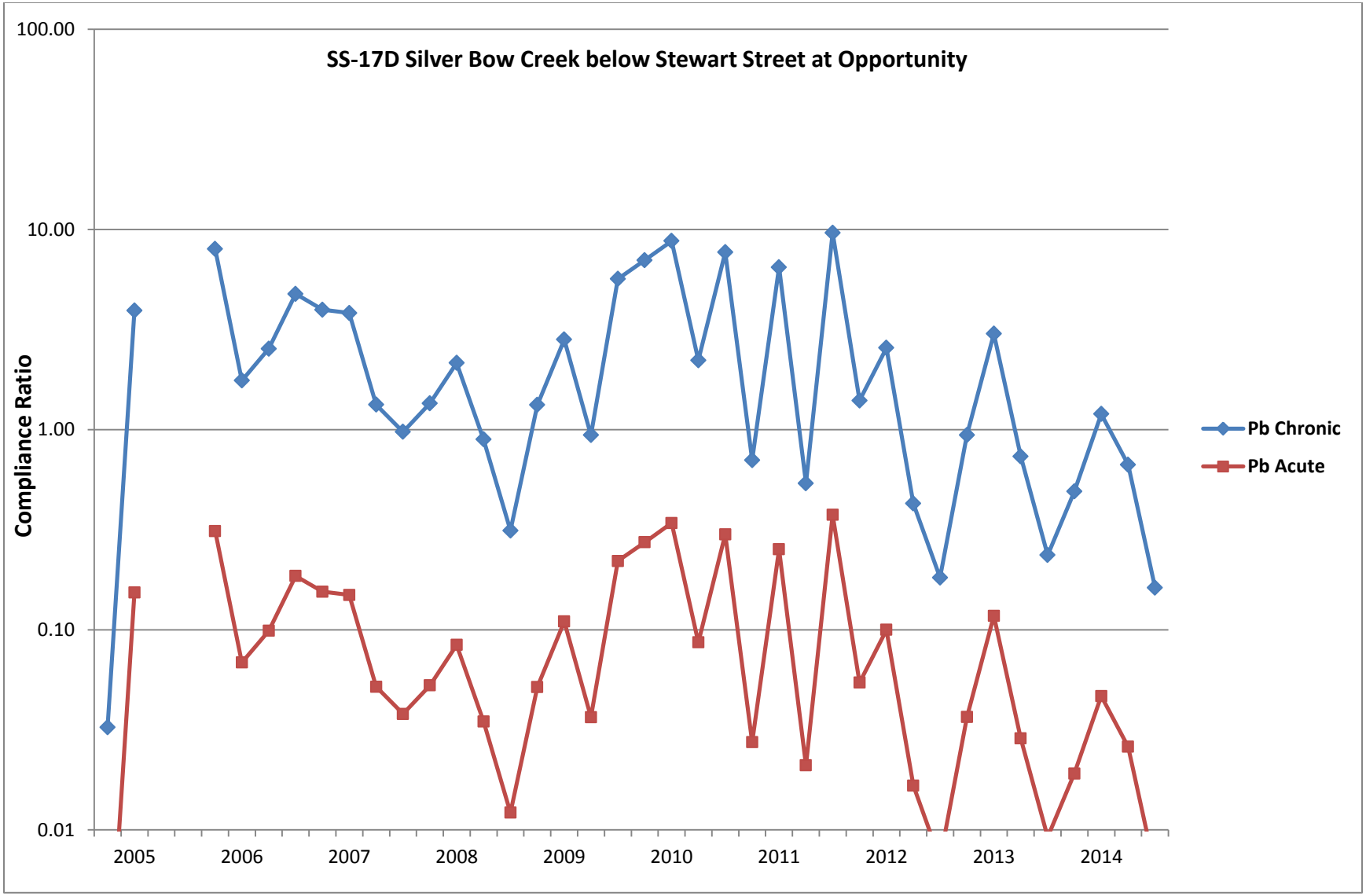

Figure 1-61. Total recoverable lead compliance ratios for Silver Bow Creek below Stewart Street at Opportunity, 2005–2014. Compliance ratios computed from quarterly measurements.

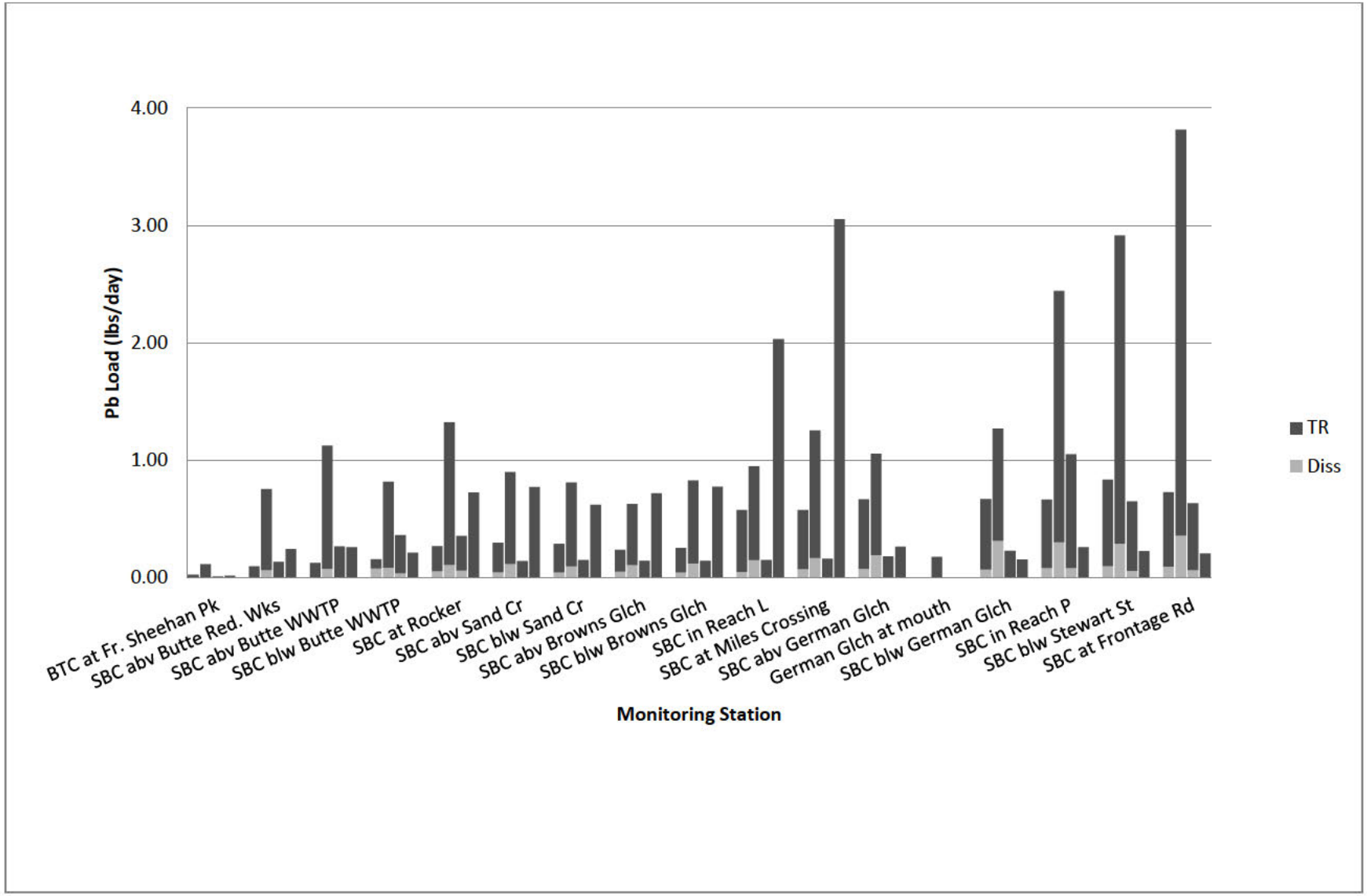

Figure 1-62. Total recoverable (TR) and dissolved (Diss) lead loads at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate no measureable loads.

1.4.5.5 Mercury

Mercury concentrations at SSTOU monitoring stations in 2014 did not show a marked spatial or temporal pattern, similar to what has been observed in other years since 2010 [Figure 1-63]. However, elevated concentrations during the past five years were more likely to be seen at the downstream monitoring stations, particularly Silver Bow Creek below Stewart Street at Opportunity. The analytical reporting limits for mercury were lowered by a factor of ten in 2014, from 0.00005 mg/L to 0.000005 mg/L. This improved resolution resulted in more detectable measurements. For example, in 2013 only 11 of 64 samples had detectable mercury concentrations. In 2014, 53 of 68 samples had detectable mercury concentrations. However, only three of those 53 samples exceeded the former reporting level. Detectable mercury concentrations in 2014 ranged from 0.000005 to 0.000360 mg/L. The highest mercury concentrations were observed in Silver Bow Creek at Miles Crossing and in Reach L in Q4 2014 along with elevated turbidity and total suspended sediment concentrations. The next highest concentration was in Reach P in Q3. The spatial and seasonal variability of the mercury concentrations suggests that mercury sources may be small diffuse nonpoint sources within Silver Bow Creek proper and its tributaries, including Blacktail Creek and German Gulch. Nearly all mercury detections were in a sediment associated, total recoverable form. Dissolved mercury was detected in only 16 of 68 site measurements in 2014, and all of those concentrations were close to the analytical reporting limit of 0.000005 mg/L (the maximum dissolved mercury concentration was 0.000007 mg/L).

Mercury concentrations at SSTOU monitoring stations in 2014 cannot be directly compared to 2013 and earlier years due to the lowered reporting levels. However, they generally appeared to be within the range of concentrations observed from 2010-2013. One exception was the 0.000360 mg/L total recoverable mercury concentration in Silver Bow Creek at Miles Crossing in Q4 2104, which was the highest concentration measured during the 2010-2014 period. The next highest mercury measurement was 0.00034 mg/L measured in Q4 2011 in Silver Bow Creek below Stewart Street at Opportunity. Longer-term mercury data are limited and temporal trends in median total recoverable mercury concentration over the 2005–2014 are not particularly conclusive, except that mercury concentrations appear to have fallen in Silver Bow Creek below Stewart Street at Opportunity since 2005 [Figure 1-63]. Most median mercury concentrations prior to 2014 were below the 0.00005 mg/L reporting limits.

In total, 42 of 68 (62%) samples had total recoverable mercury concentrations in excess of the MDHES [1994] HHSWS [Table 1-16]. These included 7 of 17 (41%) exceedances in Q1, 16 of 17 (94%) exceedances in Q2, 11 of 17 (65%) exceedances in Q3, and of 7 of 17 (41%) exceedances in Q4.

Figure 1-65 through Figure 1-70 present compliance ratios for total recoverable mercury for Silver Bow Creek stations below the Butte WWTP, at Rocker, above and below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity. The HHSWS and chronic ALS compliance ratios for mercury for the 2005–2014 period did not suggest clear temporal trends for five of the six Silver Bow Creek monitoring stations that were examined. However, prior to 2014, reporting limits were variable and generally much higher than the MDHES [1994]

HHSWS and most samples were below those reporting limits. Therefore, it is difficult to discern temporal trends from these data. The Silver Bow Creek below Stewart Street at Opportunity station had a greater frequency of detectable mercury than the other five stations and the greatest number of compliance ratio values above 1.0.

Estimated loads for mercury in Silver Bow Creek during 2014 suggested that the more significant source areas were within the lower sections of the stream from the site in Reach L and continuing downstream to the lower-most site at Frontage Road [Figure 1-71].

Table 1-16. Total recoverable mercury concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	ND	0.000009	ND	ND
SS-05A	Silver Bow Creek above Butte Reduction Works	ND	0.000029	ND	0.000009
SS-06G	Silver Bow Creek above WWTP	0.000005	0.000027	0.000027	ND
SS-07	Silver Bow Creek below WWTP	0.000006	0.000022	0.000015	ND
SS-08	Silver Bow Creek at Rocker	0.000011	0.000029	0.000025	0.000025
SS-10A	Silver Bow Creek above Sand Creek	0.000014	0.000016	0.000014	0.000036
SS-10B	Silver Bow Creek below Sand Creek	0.000012	0.000021	0.000014	0.000026
SS-11C	Silver Bow Creek above Browns Gulch	0.000009	0.000018	0.000012	0.000034
SS-11D	Silver Bow Creek below Browns Gulch	0.000010	0.000018	0.000013	0.000028
SS-13	Silver Bow Creek in Reach L	0.000014	0.000017	0.000011	0.000086
SS-14	Silver Bow Creek at Miles Crossing	0.000018	0.000027	0.000012	0.000360
SS-15A	Silver Bow Creek above German Gulch	0.000018	0.000021	0.000015	ND
SS-15G	German Gulch near confluence	ND	0.000042	ND	ND
SS-15B	Silver Bow Creek below German Gulch	0.000010	0.000013	0.000013	ND
SS-16	Silver Bow Creek in Reach P near Fairmont	0.000017	0.000023	0.000063	ND
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.000019	0.000032	0.000040	ND
SS-19	Silver Bow Creek at Frontage Road	0.000017	0.000038	0.000036	ND

ND Not detected at analytical reporting limit.

Exceeds the chronic aquatic life standard [MDHES, 1994].

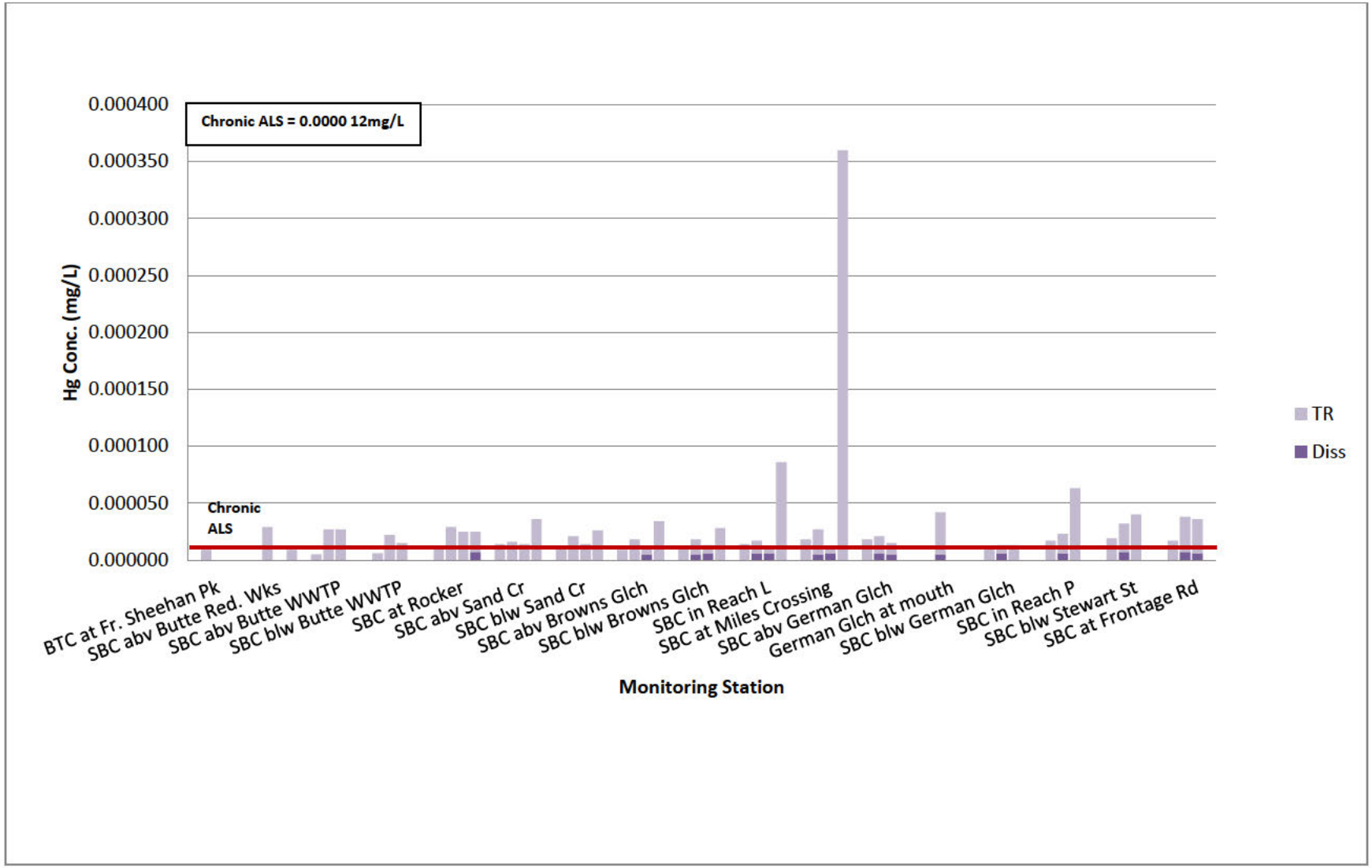

Figure 1-63. Total recoverable (TR) and dissolved (Diss) mercury concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. Chronic aquatic life standard (ALS) from MDHES [1994].

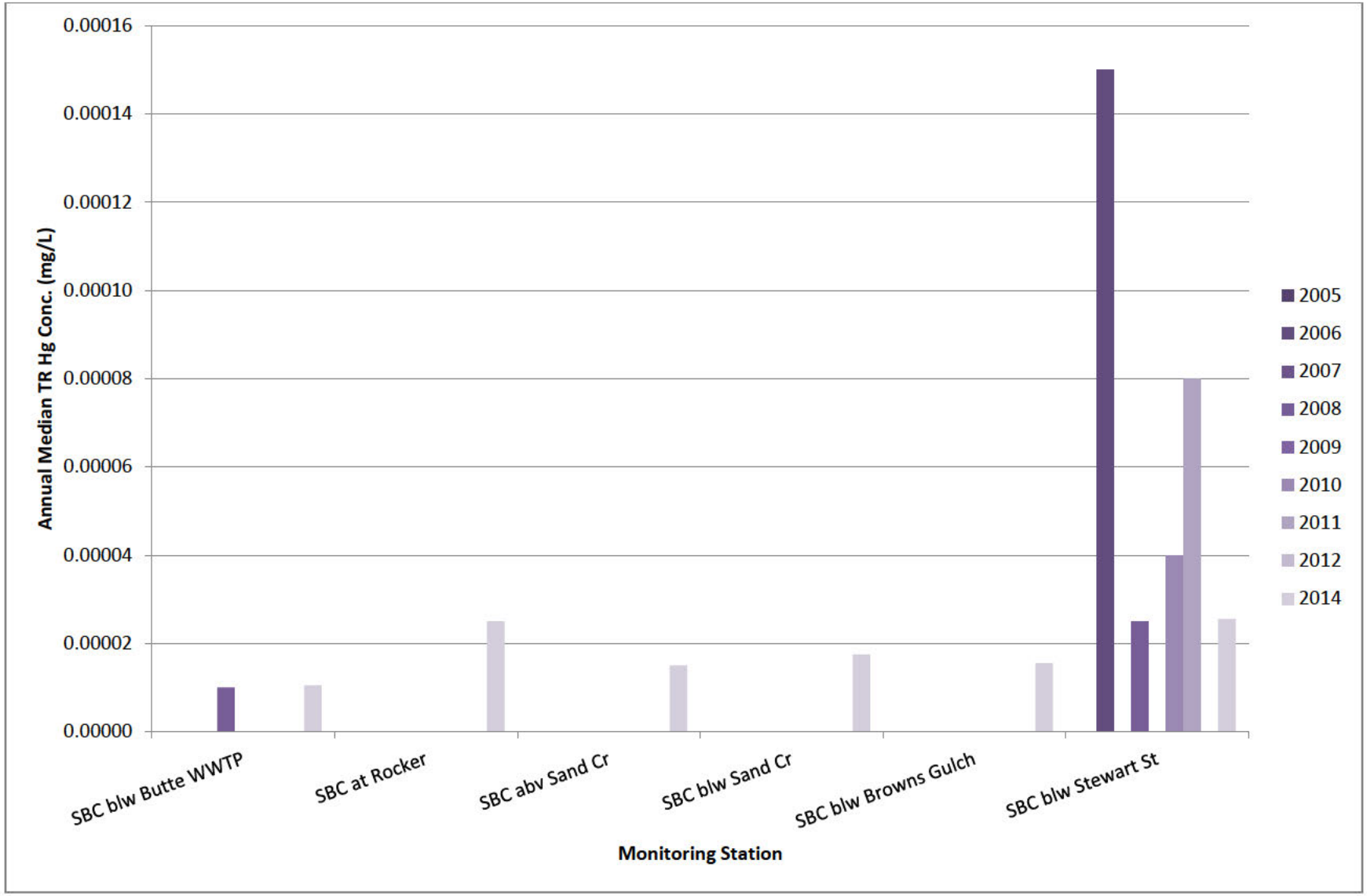

Figure 1-64. Annual median total recoverable mercury concentrations at selected Streamside Tailings Operable Unit monitoring stations, 2005–2014.

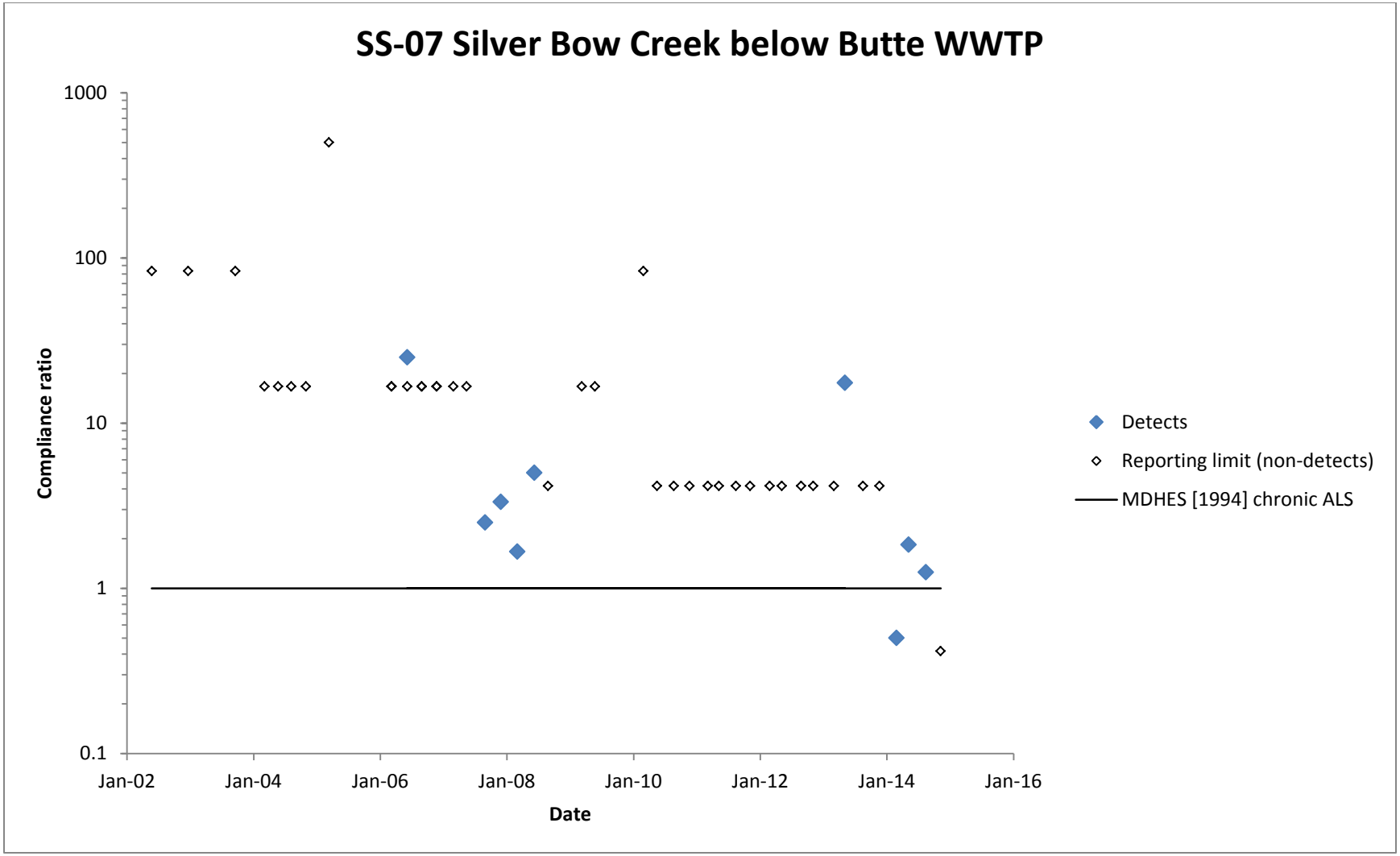

Figure 1-65. Total recoverable mercury compliance ratios for samples from Silver Bow Creek below the Butte wastewater treatment plant discharge, 2002–2014. Blue diamonds represent samples with concentrations above the reporting limit. White diamonds represent the reporting limit of those samples with concentrations that were not detected at concentrations above the reporting limit.

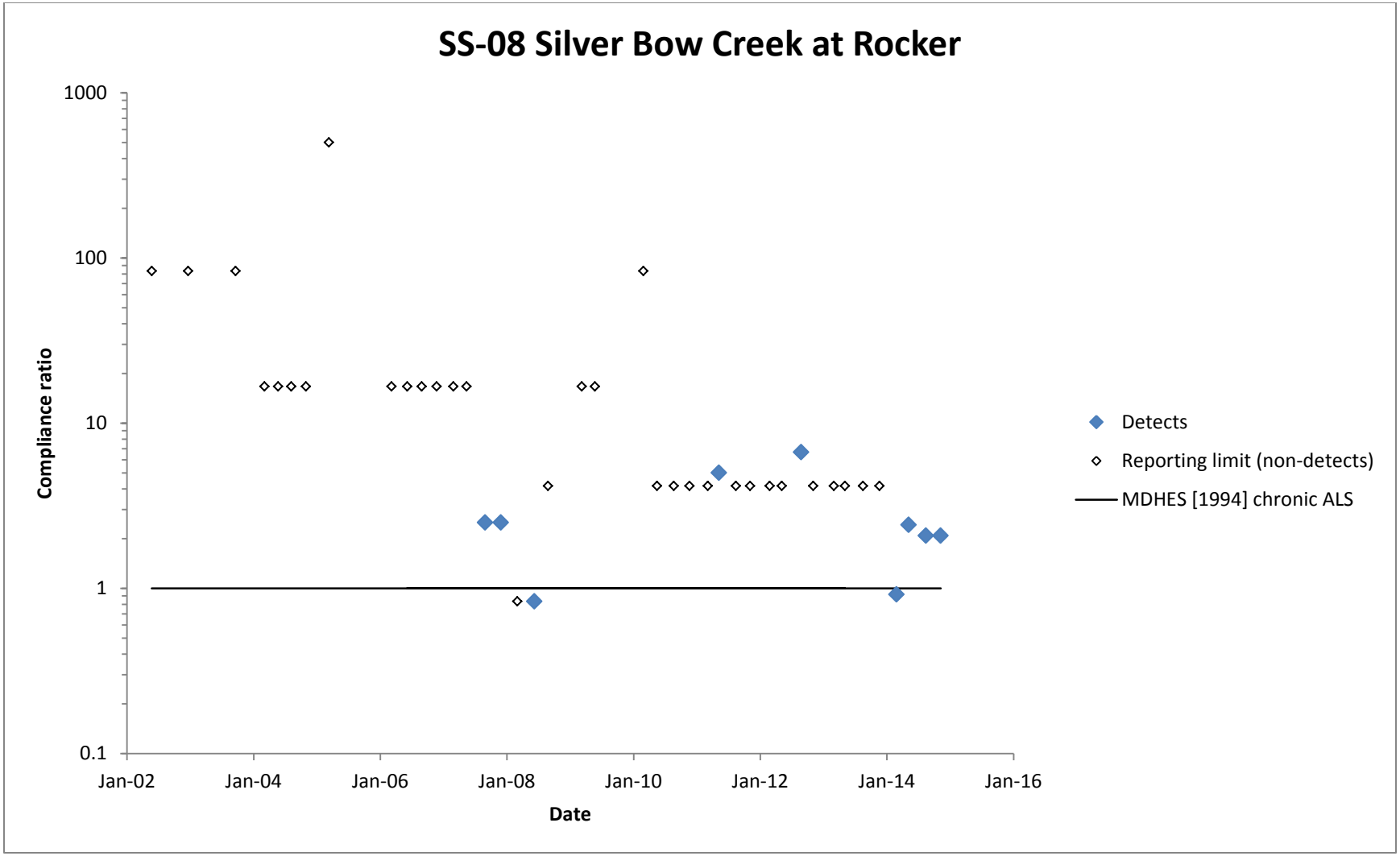

Figure 1-66. Total recoverable mercury compliance ratios for samples from Silver Bow Creek at Rocker, 2002–2014. Blue diamonds represent samples with concentrations above the reporting limit. White diamonds represent the reporting limit of those samples with concentrations that were not detected at concentrations above the reporting limit.

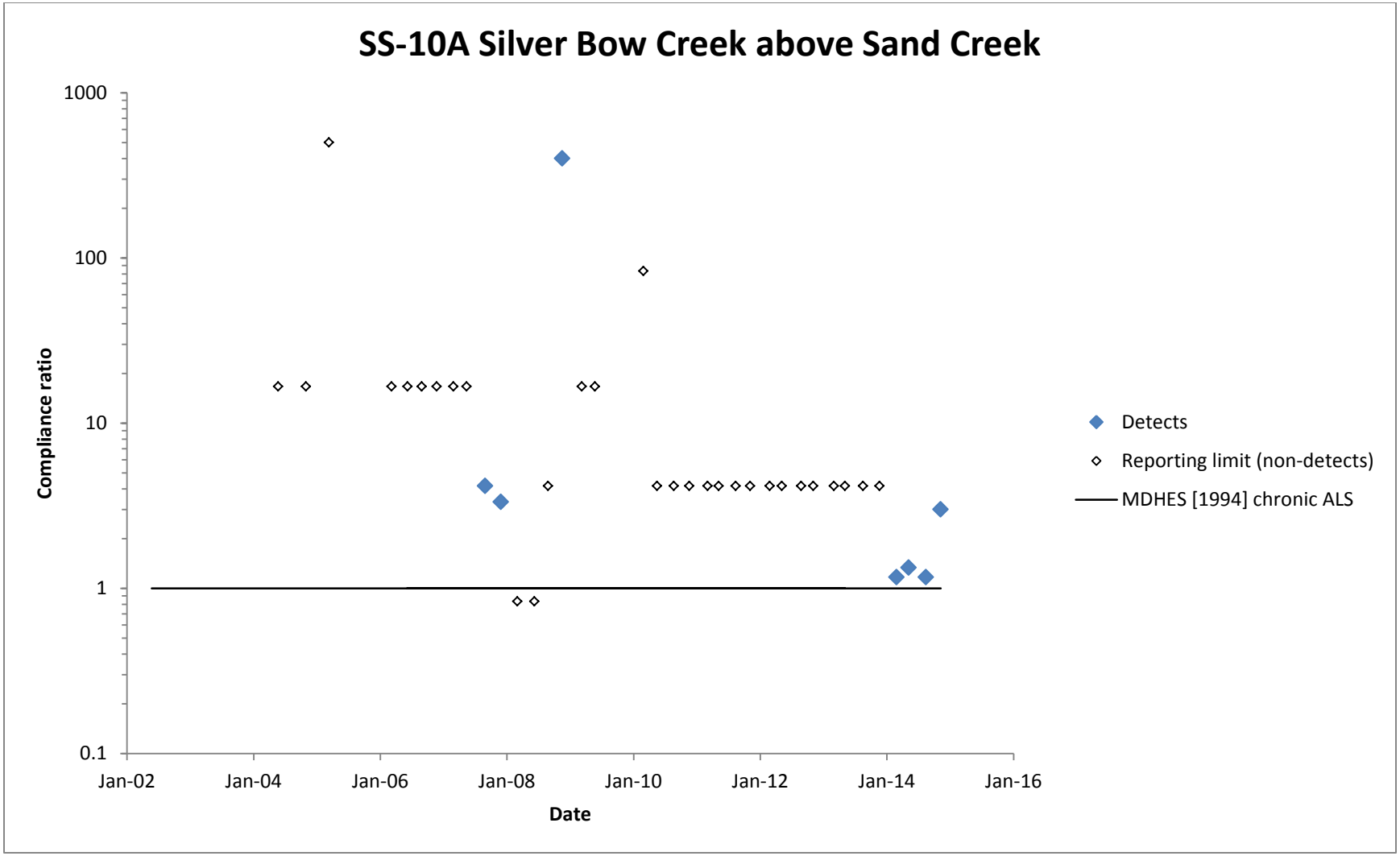

Figure 1-67. Total recoverable mercury compliance ratios for samples from Silver Bow Creek above Sand Creek, 2004–2014. Blue diamonds represent samples with concentrations above the reporting limit. White diamonds represent the reporting limit of those samples with concentrations that were not detected at concentrations above the reporting limit.

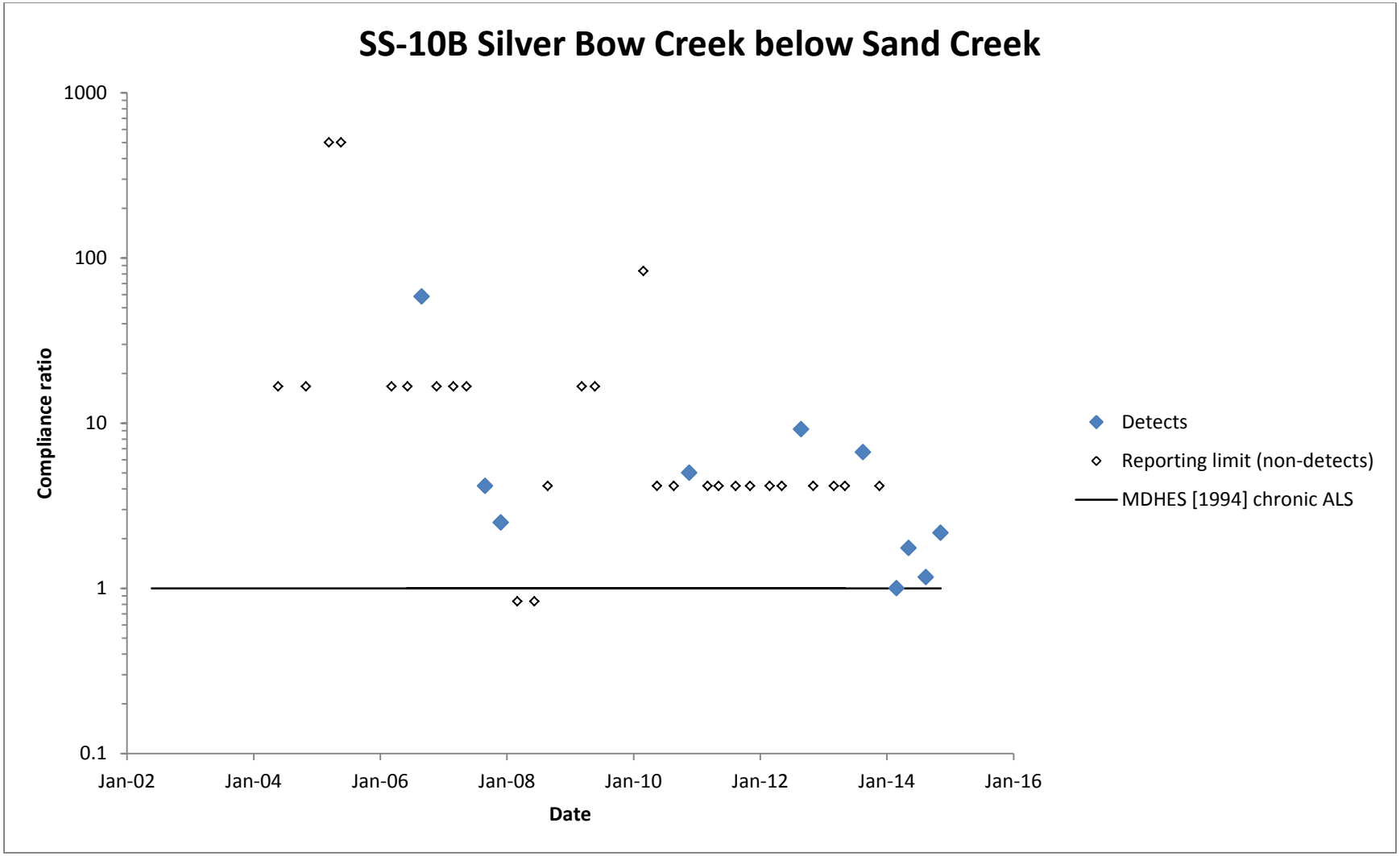

Figure 1-68. Total recoverable mercury compliance ratios for samples from Silver Bow Creek below Sand Creek, 2004–2014. Blue diamonds represent samples with concentrations above the reporting limit. White diamonds represent the reporting limit of those samples with concentrations that were not detected at concentrations above the reporting limit.

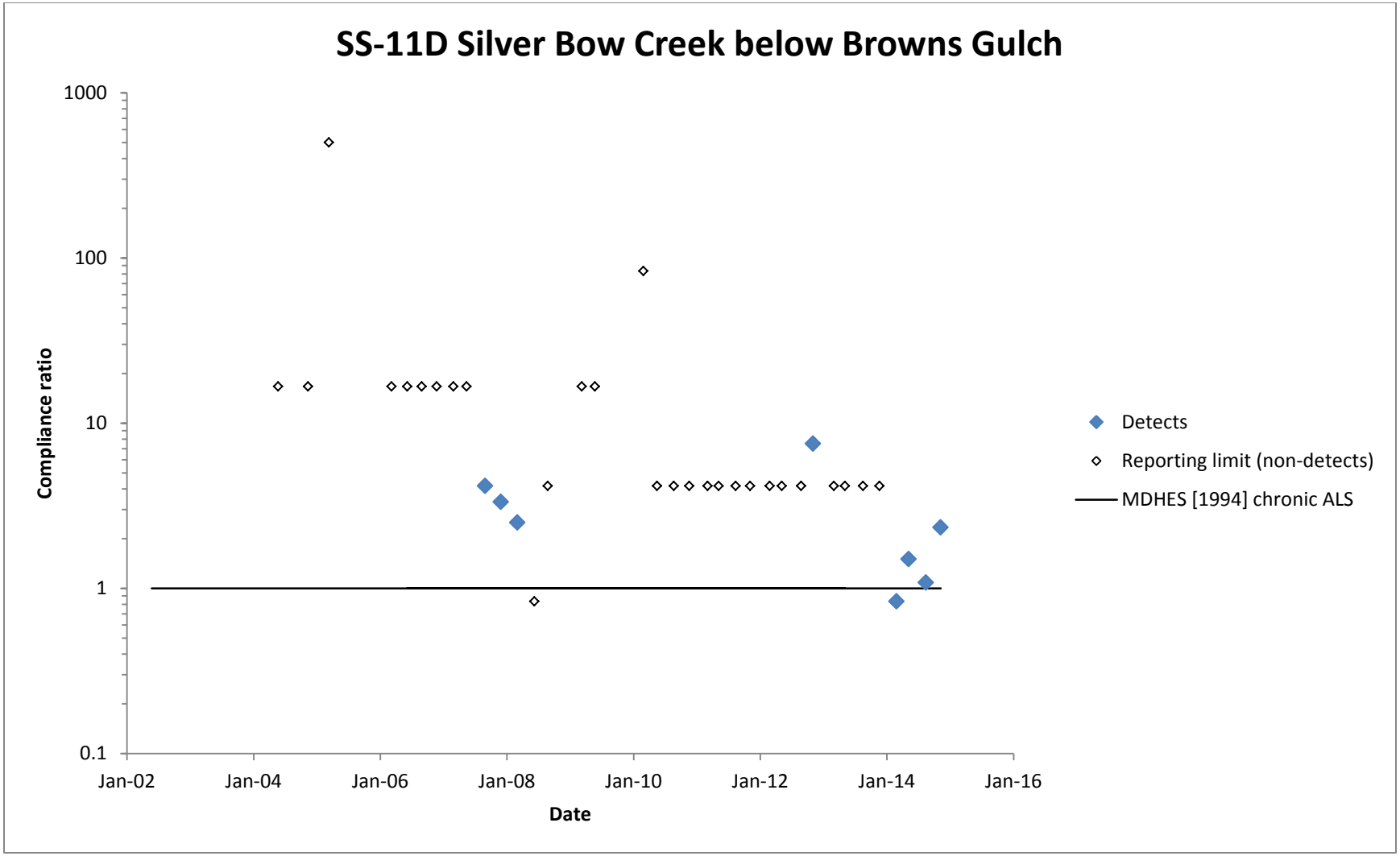

Figure 1-69. Total recoverable mercury compliance ratios for samples from Silver Bow Creek below Browns Gulch, 2004–2014. Blue diamonds represent samples with concentrations above the reporting limit. White diamonds represent the reporting limit of those samples with concentrations that were not detected at concentrations above the reporting limit.

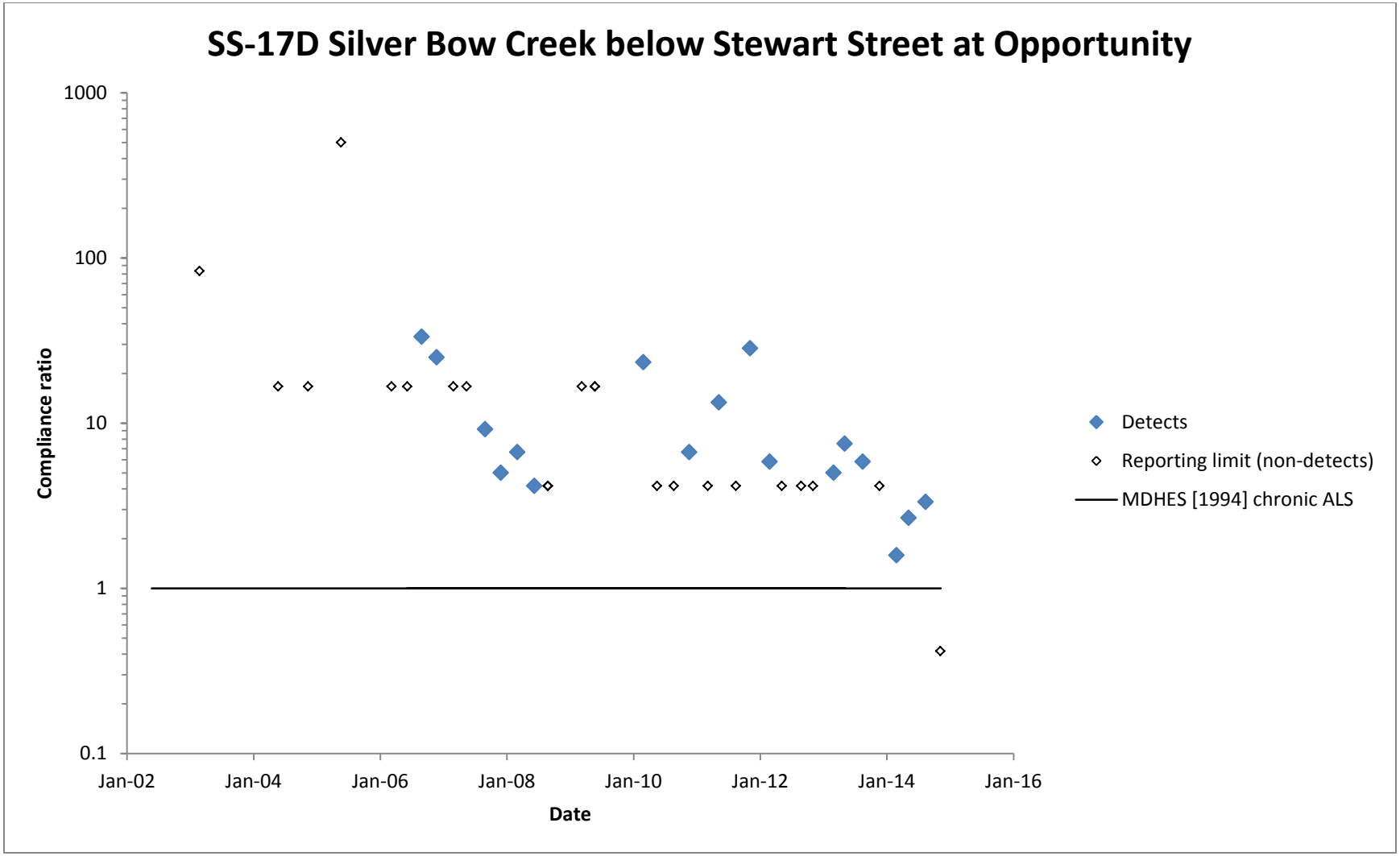

Figure 1-70. Total recoverable mercury compliance ratios for samples from Silver Bow Creek below Stewart Street at Opportunity, 2003–2014. Blue diamonds represent samples with concentrations above the reporting limit. White diamonds represent the reporting limit of those samples with concentrations that were not detected at concentrations above the reporting limit.

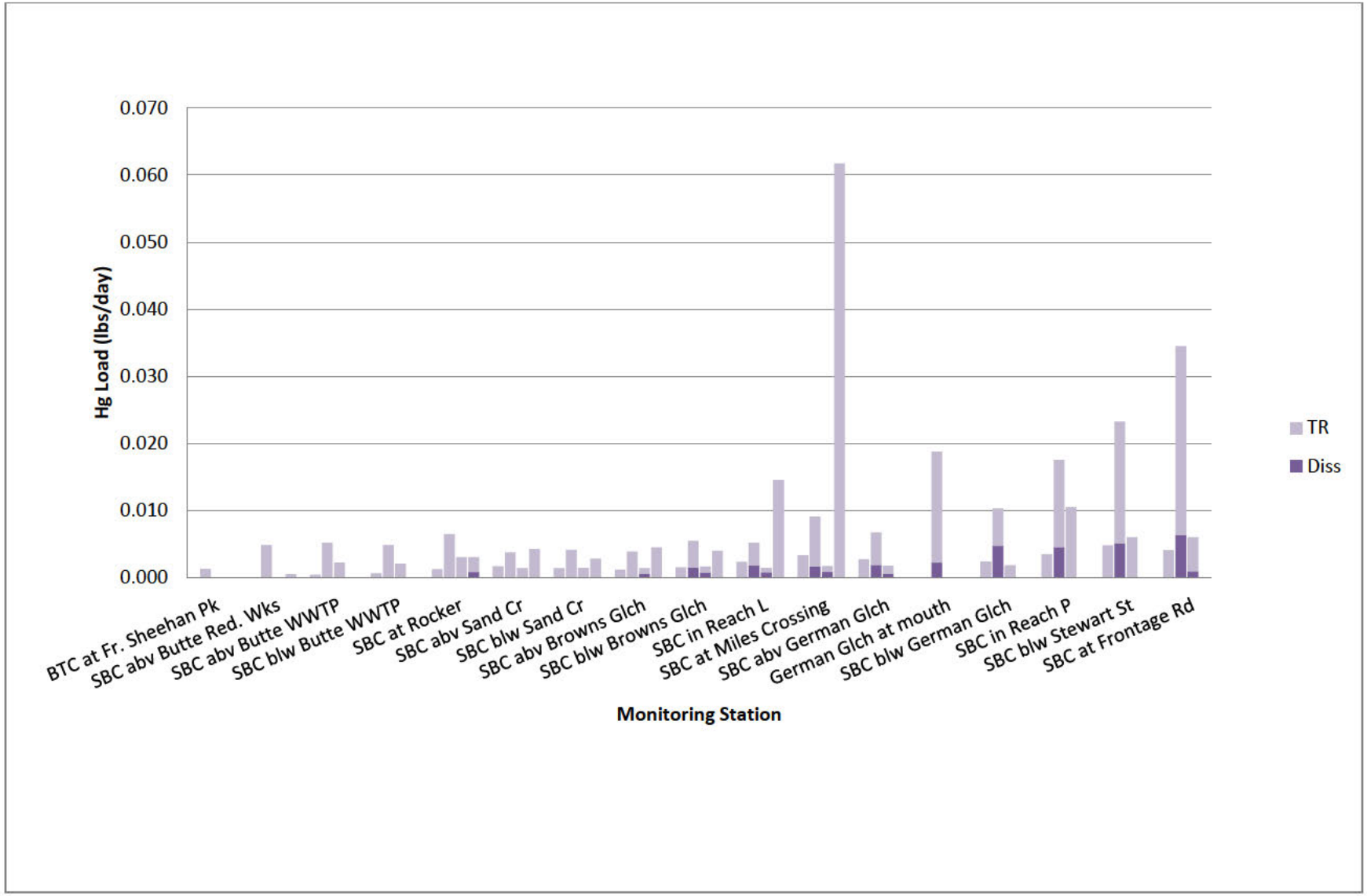

Figure 1-71. Total recoverable (TR) and dissolved (Diss) mercury loads at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate no measureable load.

1.4.5.6 Zinc

Zinc concentrations were consistently low in Blacktail Creek at Father Sheehan Park and increased gradually downstream in Silver Bow Creek from above the Butte WWTP to above German Gulch. Zinc concentrations declined immediately below German Gulch, then increased in the segment of Silver Bow Creek from German Gulch to below Stewart Street at Opportunity, then appeared to stabilize at the lower-most site at Frontage Road [Figure 1-72].

The highest total recoverable zinc concentration observed during quarterly monitoring in 2014 was in Silver Bow Creek at Miles Crossing during the high turbidity conditions encountered at that and several adjacent sites in Q4 2104. Zinc concentrations were also elevated in Silver Bow Creek in Reach L, above and below Sand Creek, and above and below Browns Gulch during the Q4 monitoring event. Zinc concentrations in German Gulch and Blacktail Creek were consistently the lowest observed among the 17 stations in the monitoring network. The highest zinc concentrations at most (12 of 17) stations were observed during the Q4 monitoring event.

A high proportion of the zinc measured at SSTOU monitoring stations during 2014 was present in the dissolved phase [Table 1-17]. Ratios of dissolved to total recoverable zinc were highest at most sites in Q1 or Q4.

Median concentrations of total recoverable zinc at selected Silver Bow Creek stations within the remediated section of the stream were generally comparable during the period from 2007–2014, and much lower than during the 2005–2006 period [Figure 1-73]. Median total recoverable zinc concentrations in Silver Bow Creek below Stewart Street at Opportunity showed continuing decreases since 2010.

Only two exceedances of the ALS for total recoverable zinc were documented at SSTOU monitoring stations in 2014 [Table 1-17], occurring at the Silver Bow Creek at Miles Crossing and in Reach L in Q4 during the high turbidity conditions at those sites. The frequency of performance goals excursions was similar in each of 2014 (2 of 68), 2013 and 2012 (1 of 64 and 1 of 56 exceedances, respectively), but less than in 2011 (3 of 56) and 2010 (10 of 56).

Figure 1-74 through Figure 1-79 present compliance ratios for total recoverable zinc for Silver Bow Creek stations below the Butte WWTP, at Rocker, above and below Sand Creek, below Browns Gulch, and below Stewart Street at Opportunity. Temporal trends in ALS compliance ratios for total recoverable zinc showed improvements in earlier years, but more static conditions in recent years. The exception was Silver Bow Creek below Stewart Street at Opportunity which has shown continuing improvements in 2014.

During the 2007–2014 period, quarterly total recoverable zinc ALS compliance ratios were below 1.0 at five of the six Silver Bow Creek stations examined. The Silver Bow Creek below Stewart Street at Opportunity station was the exception, where quarterly total recoverable zinc compliance ratios during the 2007–2014 period were 1.0 or greater during 11 of 32 quarters [Figure 1-79]. However, only one value has exceeded 1.0 in the last three years (1.04 in Q2 2013).

Spatial patterns in zinc loading during 2014 were generally similar to the spatial pattern of zinc concentrations [Figure 1-80]. Loads increased gradually from the headwaters to Miles

Crossing or above German Gulch, then increased more abruptly from below German Gulch to the Frontage Road site, particularly during Q2 when streamflows were elevated. Zinc loads were also greatly elevated in Q4 at two sites, Silver Bow Creek at Miles Crossing and in Reach L, along with elevated turbidity and total suspended sediment concentrations. Much of the zinc load was transported as dissolved zinc, except during runoff conditions in Q2 when more was present in a sediment associated form. Zinc loads estimated for 2014 quarters were within the range of loads estimated for 2012-2013 monitoring events.

Table 1-17. Total recoverable zinc concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.009	ND	ND	0.010
SS-05A	Silver Bow Creek above Butte Reduction Works	0.024	0.024	0.025	0.046
SS-06G	Silver Bow Creek above WWTP	0.032	0.035	0.029	0.041
SS-07	Silver Bow Creek below WWTP	0.049	0.032	0.041	0.049
SS-08	Silver Bow Creek at Rocker	0.071	0.059	0.064	0.102
SS-10A	Silver Bow Creek above Sand Creek	0.063	0.052	0.038	0.138
SS-10B	Silver Bow Creek below Sand Creek	0.071	0.052	0.047	0.140
SS-11C	Silver Bow Creek above Browns Gulch	0.116	0.078	0.070	0.189
SS-11D	Silver Bow Creek below Browns Gulch	0.113	0.066	0.095	0.177
SS-13	Silver Bow Creek in Reach L	0.080	0.051	0.112	0.236
SS-14	Silver Bow Creek at Miles Crossing	0.088	0.057	0.033	0.302
SS-15A	Silver Bow Creek above German Gulch	0.129	0.058	0.048	0.139
SS-15G	German Gulch near confluence	ND	ND	ND	ND
SS-15B	Silver Bow Creek below German Gulch	0.100	0.027	0.044	0.096
SS-16	Silver Bow Creek in Reach P near Fairmont	0.128	0.042	0.088	0.131
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.158	0.058	0.095	0.146
SS-19	Silver Bow Creek at Frontage Road	0.145	0.065	0.095	0.144

ND Not detected at analytical reporting limit.

Exceeds the chronic aquatic life standard [MDHES, 1994].

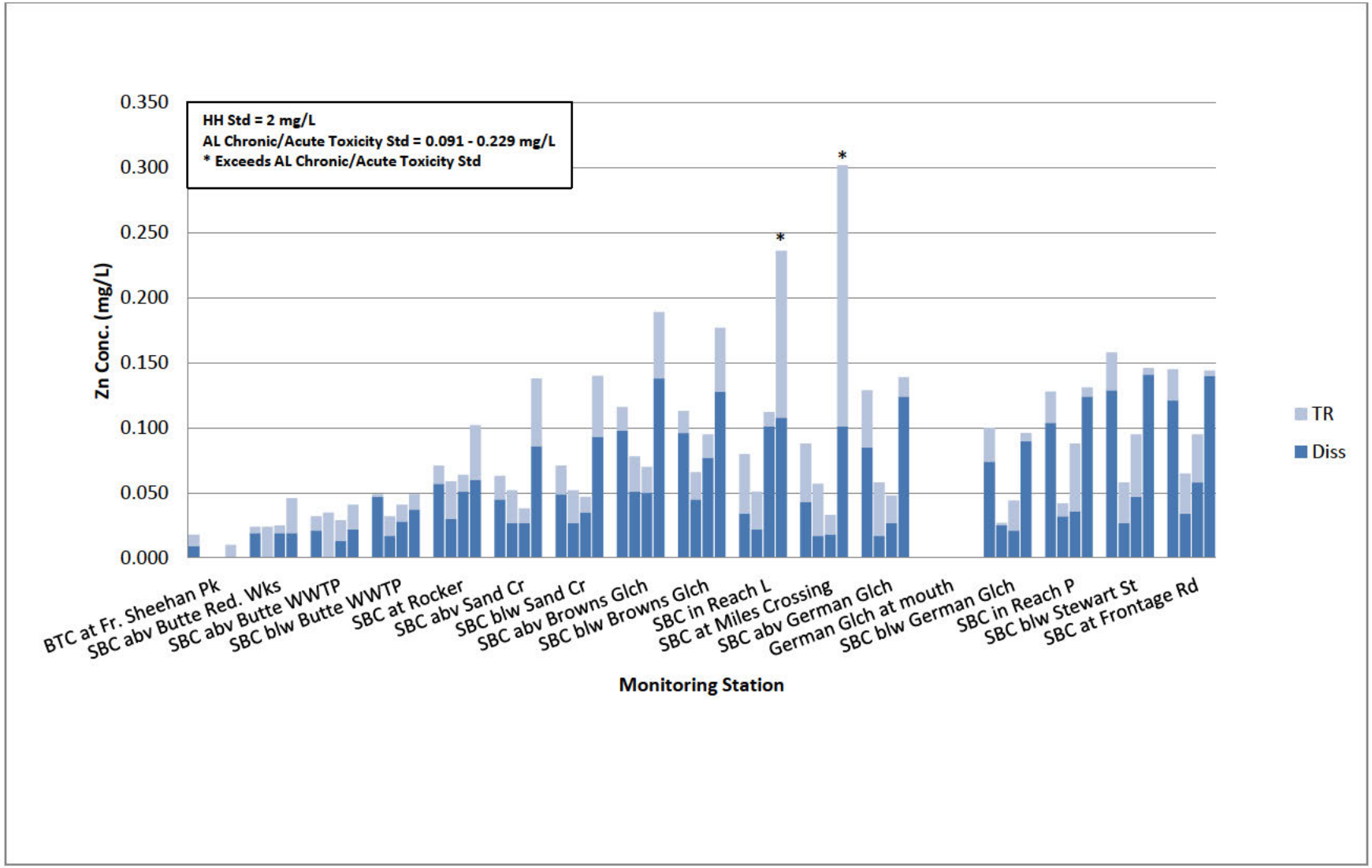

Figure 1-72. Total recoverable (TR) and dissolved (Diss) zinc concentrations at Streamside Tailings Operable Unit monitoring stations, 2014. Human Health (HH Std) and aquatic life toxicity (AL Chronic/Acute Toxicity Std) standards for total recoverable zinc are shown for reference.

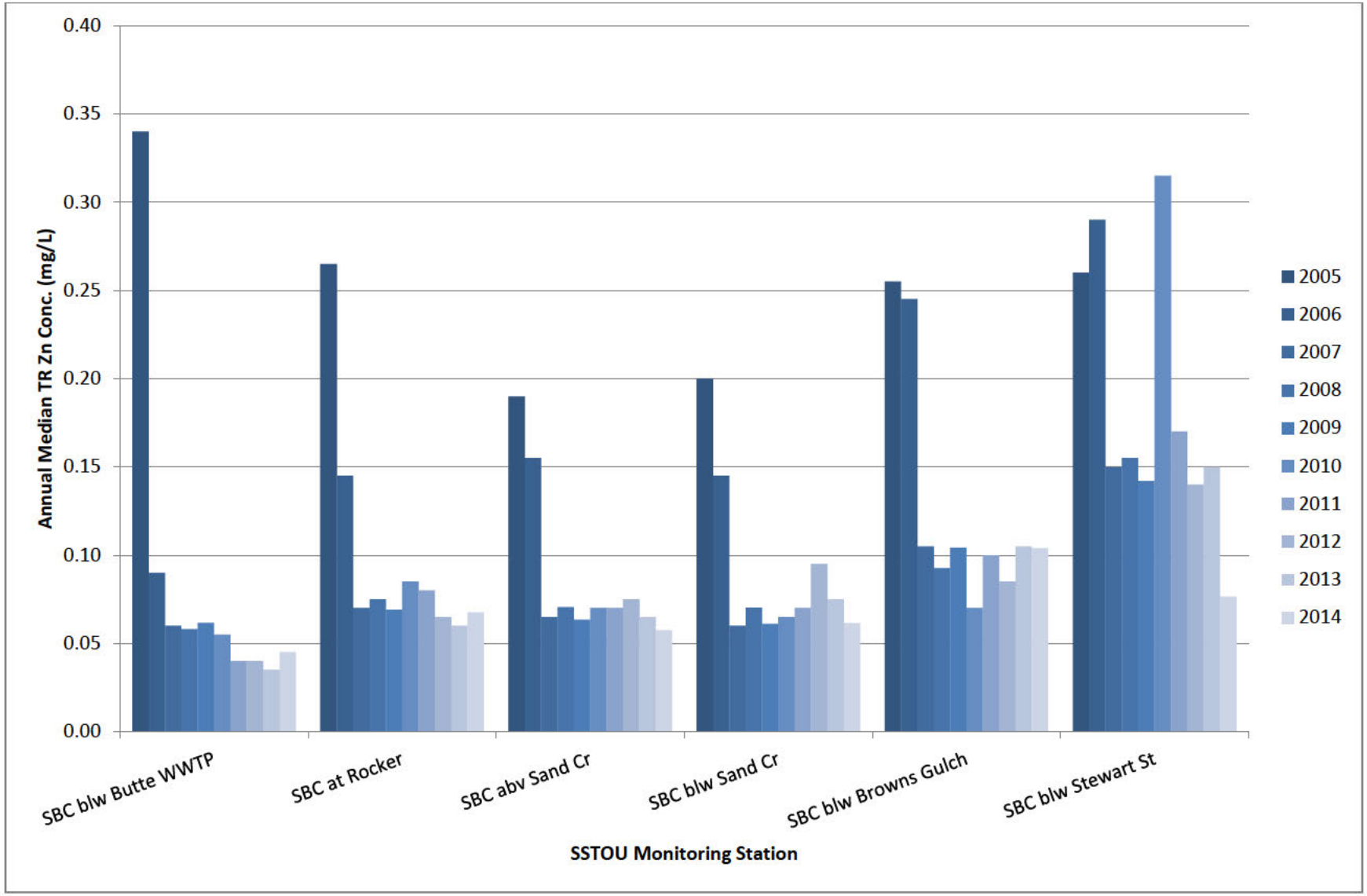

Figure 1-73. Annual median total recoverable zinc concentrations at selected Streamside Tailings Operable Unit monitoring stations, 2005–2014.

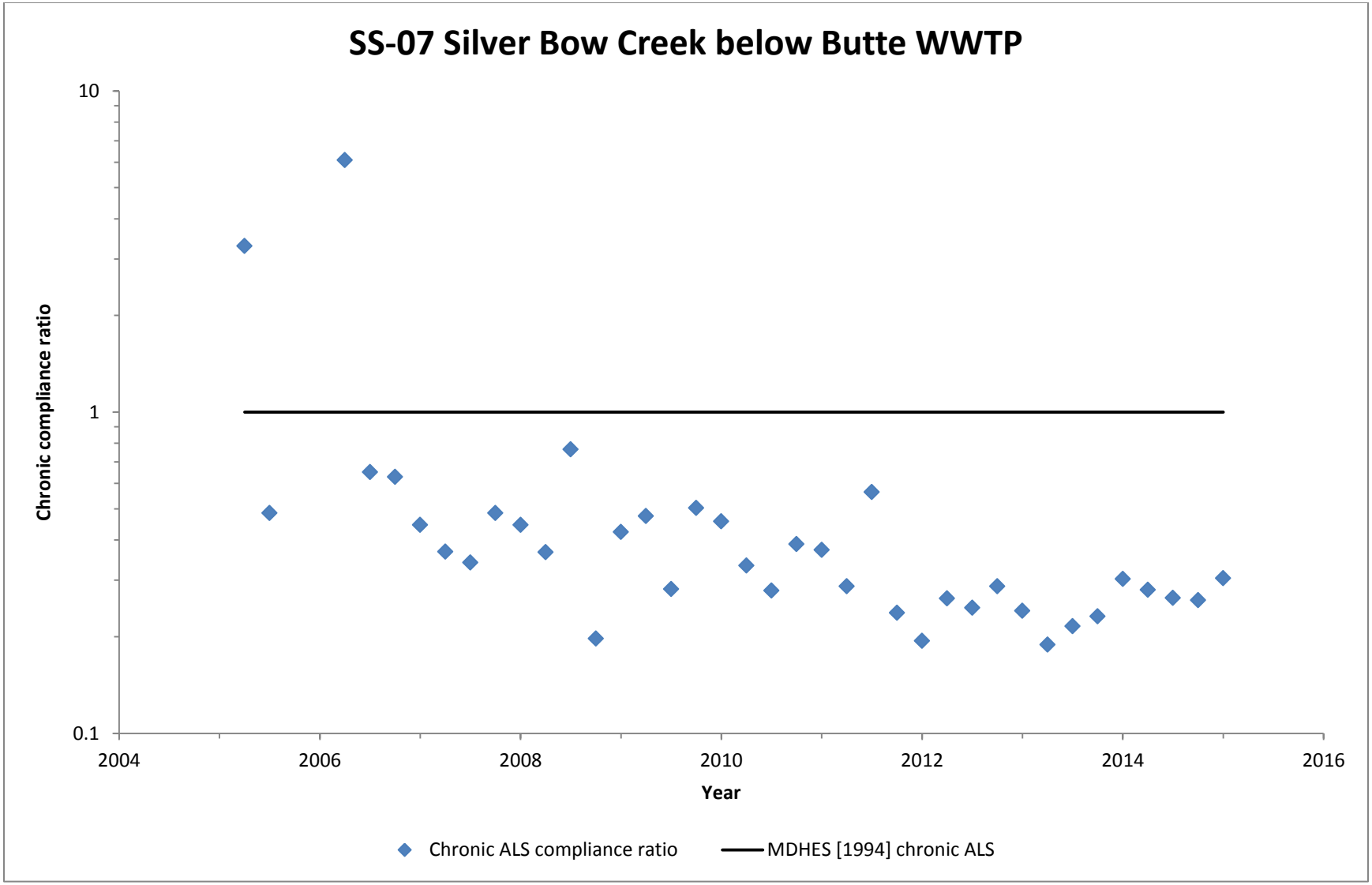

Figure 1-74. Total recoverable (TR) zinc compliance ratios for Silver Bow Creek below the Butte wastewater treatment plant discharge, 2005–2014. Compliance ratios computed from quarterly measurements.

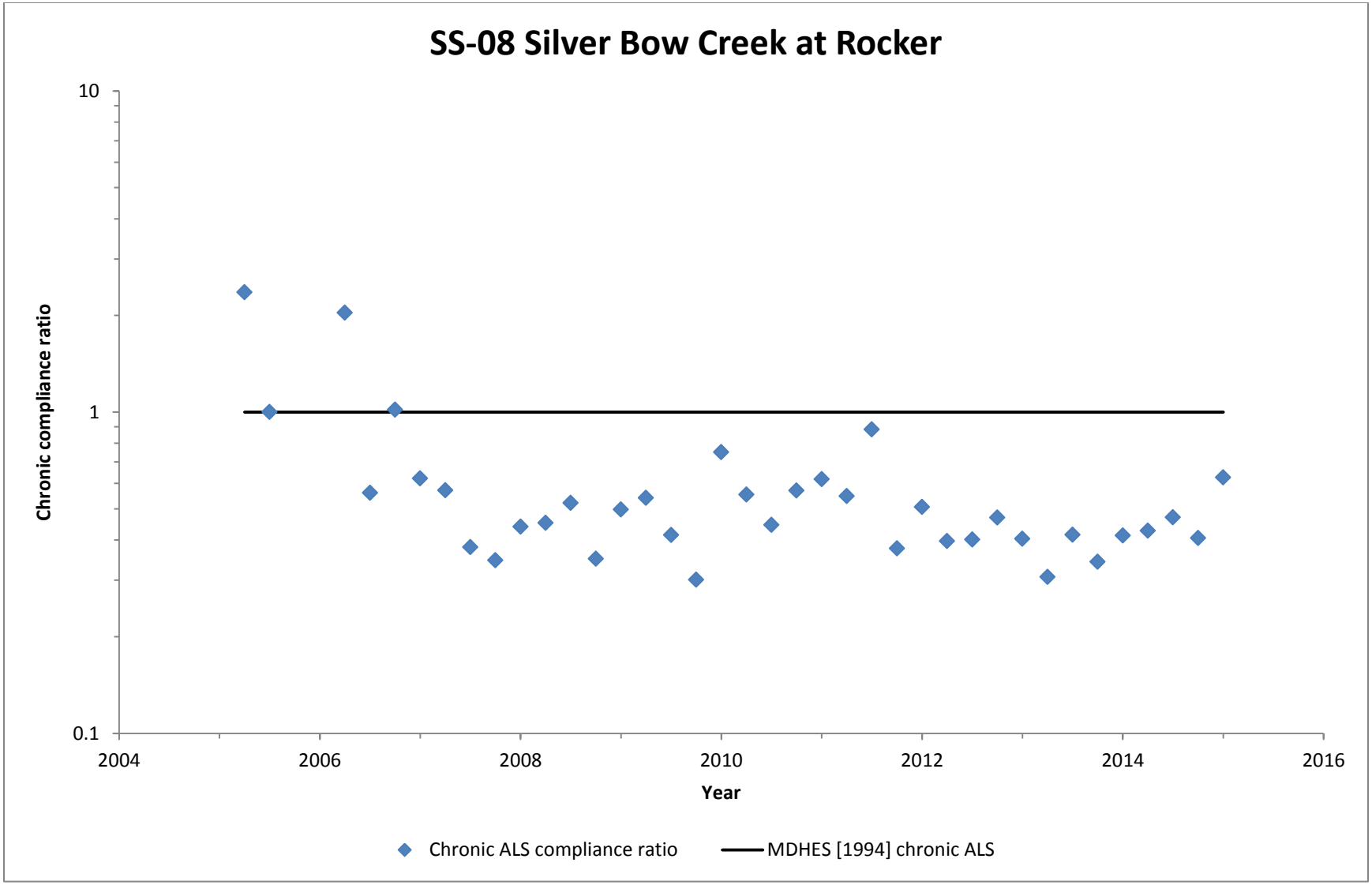

Figure 1-75. Total recoverable (TR) zinc compliance ratios for Silver Bow Creek at Rocker, 2005–2014. Compliance ratios computed from quarterly measurements.

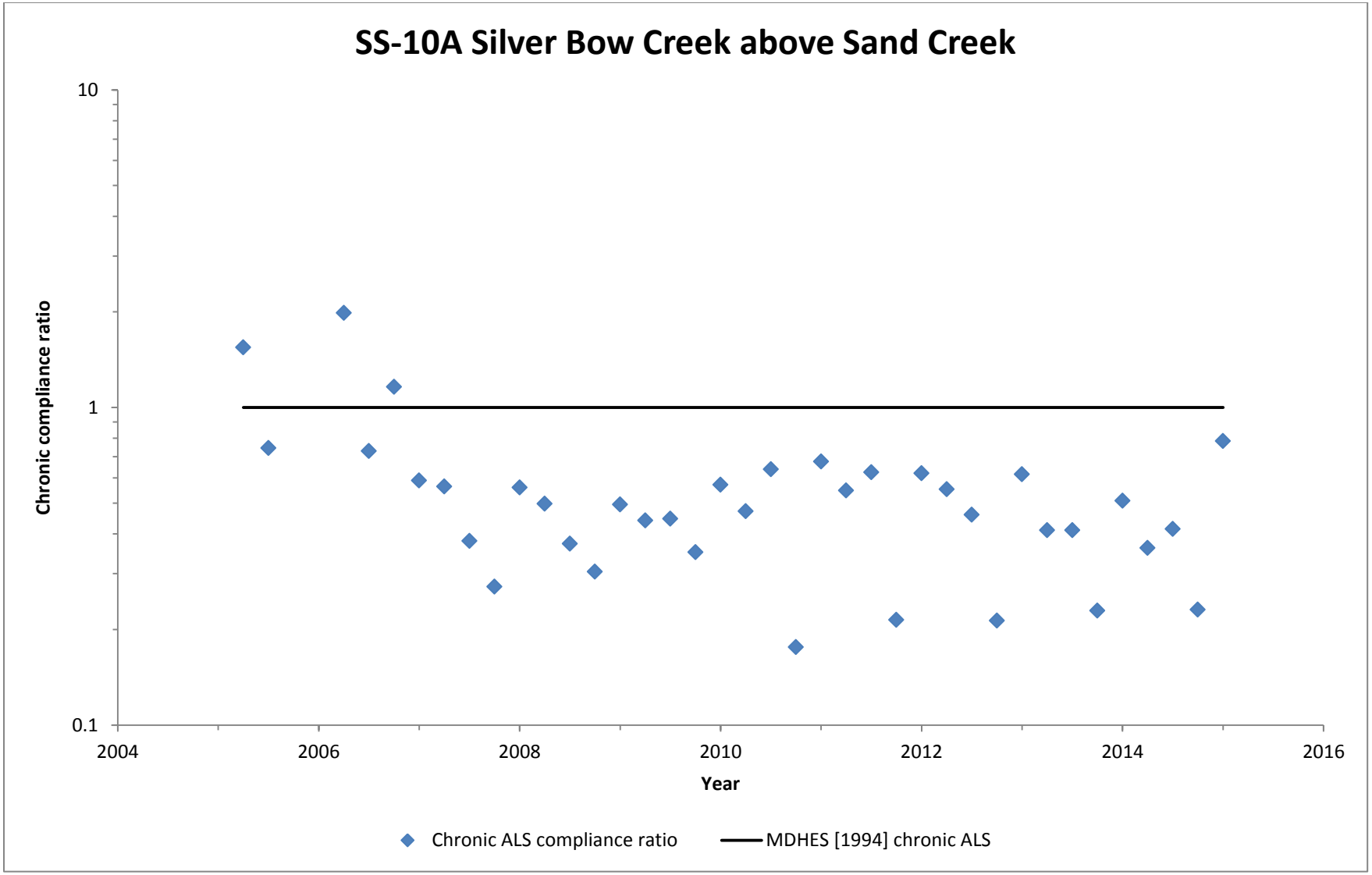

Figure 1-76. Total recoverable (TR) zinc compliance ratios for Silver Bow Creek above Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

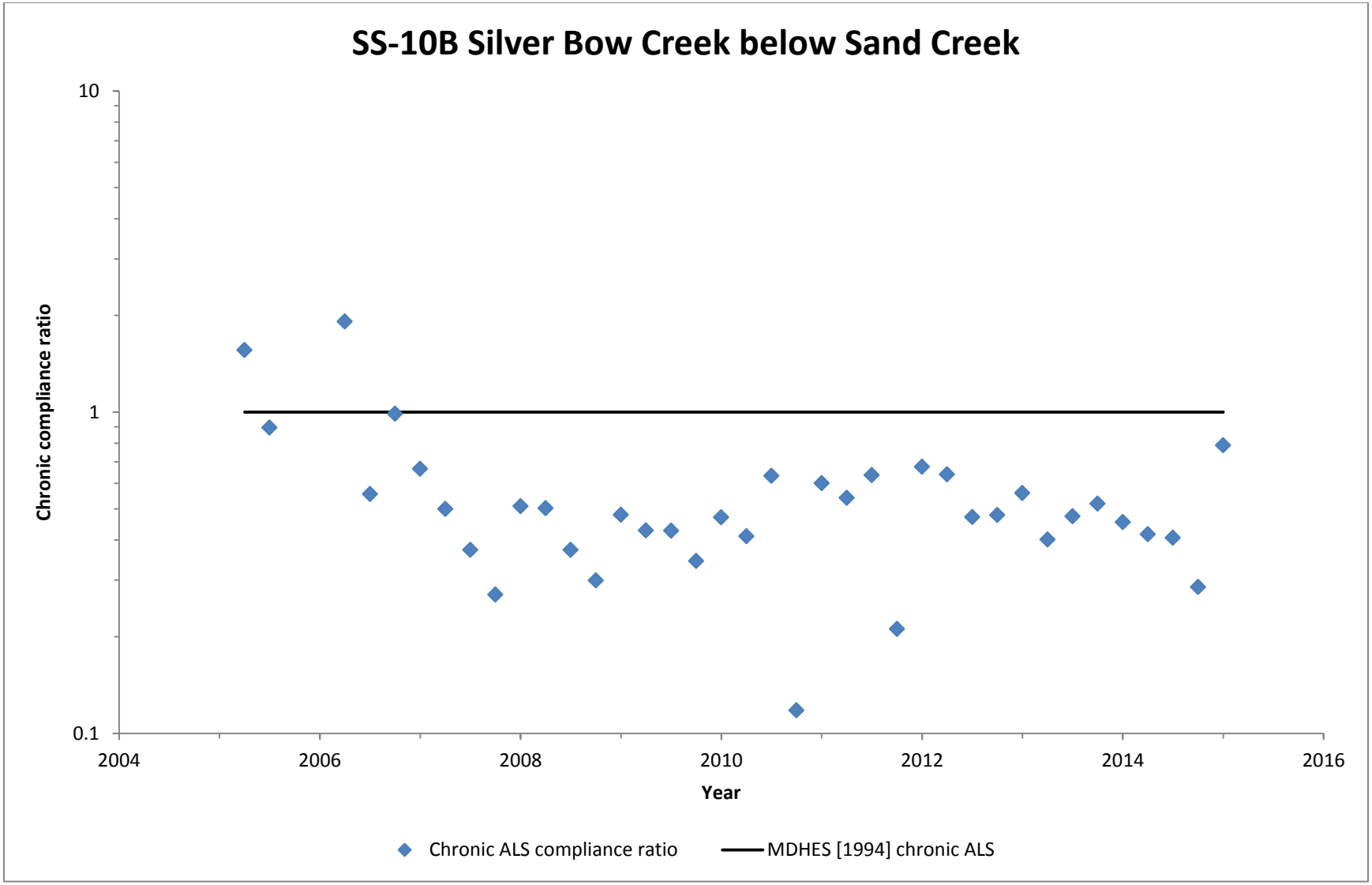

Figure 1-77. Total recoverable (TR) zinc compliance ratios for Silver Bow Creek below Sand Creek, 2005–2014. Compliance ratios computed from quarterly measurements.

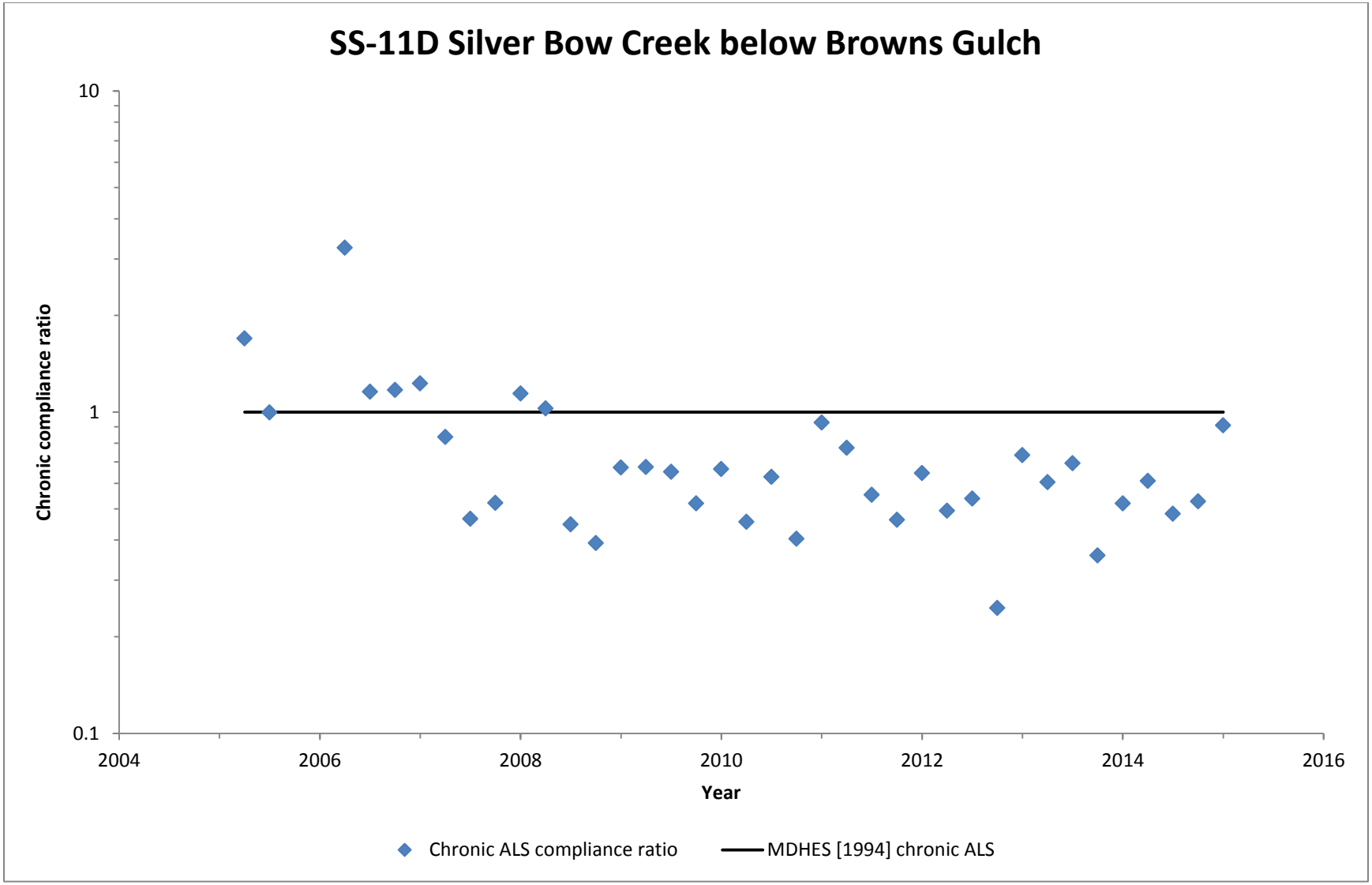

Figure 1-78. Total recoverable (TR) zinc compliance ratios for Silver Bow Creek below Browns Gulch, 2005–2014. Compliance ratios computed from quarterly measurements.

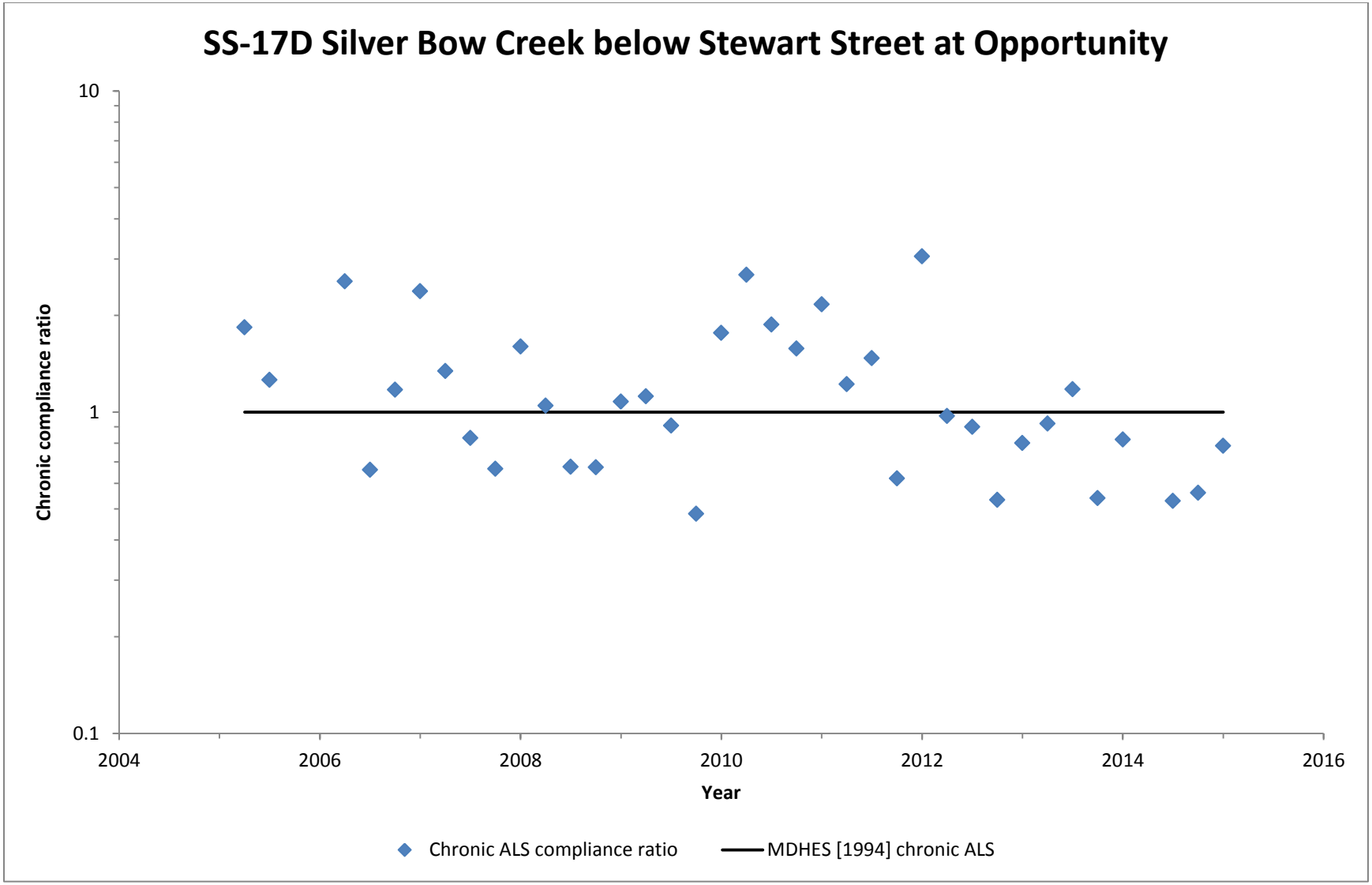

Figure 1-79. Total recoverable (TR) zinc compliance ratios for Silver Bow Creek below Stewart Street at Opportunity, 2005–2014. Compliance ratios computed from quarterly measurements.

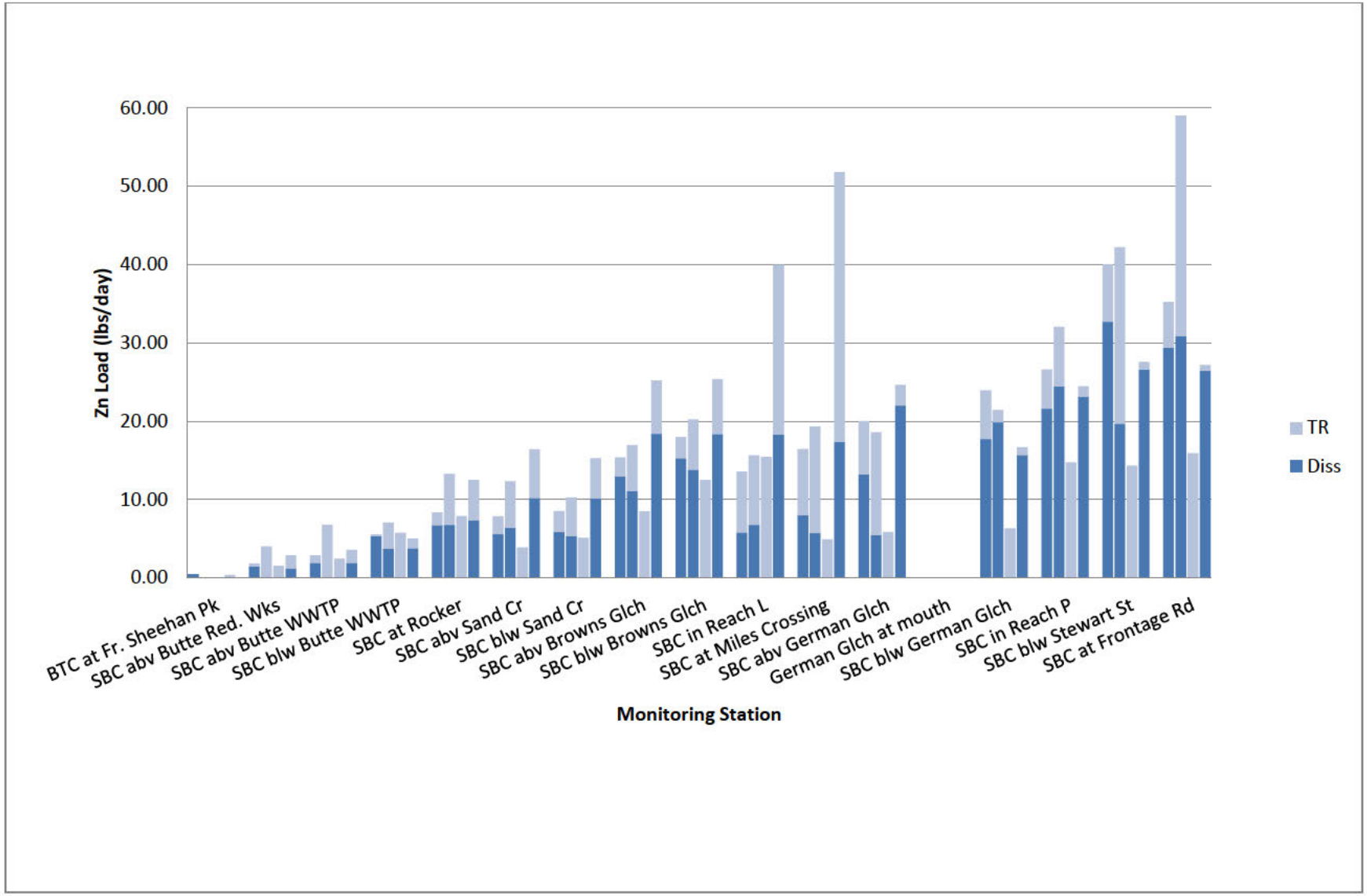

Figure 1-80. Total recoverable (TR) and dissolved (Diss) zinc loads at Streamside Tailings Operable Unit monitoring stations, 2014. No bars indicate no measureable loads.

1.4.6 Other Metals

1.4.6.1 Aluminum

Dissolved aluminum was detected at concentrations above the reporting limit (0.009 mg/L) in 6% of the samples (4 of 68) collected in 2014; concentrations ranged from <0.009-0.013 mg/L. No samples had dissolved aluminum concentrations exceeding the MDEQ [2012a] standards.

Total recoverable aluminum was detected at concentrations above the reporting limit in 100% of the samples (68 of 68) in 2014; concentrations ranged from 0.025-1.75 mg/L.

1.4.6.2 Antimony

Dissolved antimony was detected at concentrations above the reporting limit (0.0005 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable antimony was detected at concentrations above the reporting limit in 9% of the samples (6 of 68) in 2014; concentrations ranged from <0.0005-0.0014 mg/L. No samples had total recoverable antimony concentrations exceeding the MDEQ [2012a] standards.

1.4.6.3 Barium

Dissolved barium was detected at concentrations above the reporting limit (0.003 mg/L) in 100% of the samples (68 of 68) collected in 2014; concentrations ranged from 0.021-0.068 mg/L.

Total recoverable barium was detected at concentrations above the reporting limit in 100% of the samples (68 of 68) in 2014; concentrations ranged from 0.018-0.074 mg/L. No samples had total recoverable barium concentrations exceeding the MDEQ [2012a] standards.

1.4.6.4 Beryllium

Dissolved beryllium was detected at concentrations above the reporting limit (0.0008 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable beryllium was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014. No samples had total recoverable beryllium concentrations exceeding the MDEQ [2012a] standards.

1.4.6.5 Boron

Dissolved boron was detected at concentrations above the reporting limit (0.1 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable boron was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014.

1.4.6.6 Chromium

Dissolved chromium was detected at concentrations above the reporting limit (0.01 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable chromium was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014. No samples had total recoverable chromium concentrations exceeding the MDEQ [2012a] standards.

1.4.6.7 Cobalt

Dissolved cobalt was detected at concentrations above the reporting limit (0.01 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable cobalt was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014.

1.4.6.8 Iron

Dissolved iron was detected at concentrations above the reporting limit (0.02 mg/L) in 94% of the samples (64 of 68) collected in 2014; concentrations ranged from <0.02-0.34 mg/L.

Total recoverable iron was detected at concentrations above the reporting limit in 100% of the samples (68 of 68) in 2014; concentrations ranged from 0.04-2.38 mg/L. Four samples had total recoverable iron concentrations exceeding the MDEQ [2012a] standard [Table 1-18].

Table 1-18. Total recoverable iron concentrations (mg/L) at Streamside Tailings Operable Unit monitoring stations, 2014.

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.41	0.86	0.35	0.43
SS-05A	Silver Bow Creek above Butte Reduction Works	0.41	1.02	0.43	0.81
SS-06G	Silver Bow Creek above WWTP	0.37	1.02	0.35	0.58
SS-07	Silver Bow Creek below WWTP	0.30	0.77	0.29	0.39
SS-08	Silver Bow Creek at Rocker	0.39	0.89	0.33	0.76
SS-10A	Silver Bow Creek above Sand Creek	0.41	0.74	0.18	0.84
SS-10B	Silver Bow Creek below Sand Creek	0.40	0.72	0.16	0.76
SS-11C	Silver Bow Creek above Browns Gulch	0.36	0.56	0.18	0.70
SS-11D	Silver Bow Creek below Browns Gulch	0.32	0.51	0.16	0.75
SS-13	Silver Bow Creek in Reach L	0.56	0.56	0.18	1.64
SS-14	Silver Bow Creek at Miles Crossing	0.62	0.55	0.19	2.38
SS-15A	Silver Bow Creek above German Gulch	0.57	0.49	0.18	0.29
SS-15G	German Gulch near confluence	0.40	0.30	0.20	0.16
SS-15B	Silver Bow Creek below German Gulch	0.16	0.22	0.04	0.08
SS-16	Silver Bow Creek in Reach P near Fairmont	0.39	0.39	0.58	0.19
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.46	0.57	0.49	0.19
SS-19	Silver Bow Creek at Frontage Road	0.44	0.56	0.45	0.19

Exceeds the chronic aquatic life standard [MDEQ, 2012a].

1.4.6.9 Manganese

Dissolved manganese was detected at concentrations above the reporting limit (0.001 mg/L) in 100% of the samples (68 of 68) collected in 2014; concentrations ranged from 0.001-0.383 mg/L.

Total recoverable manganese was detected at concentrations above the reporting limit in 100% of the samples (68 of 68) in 2014; concentrations ranged from 0.004-0.763 mg/L.

1.4.6.10 Molybdenum

Dissolved molybdenum was detected at concentrations above the reporting limit (0.005 mg/L) in 47% of the samples (32 of 68) collected in 2014; concentrations ranged from <0.005-0.006 mg/L.

Total recoverable molybdenum was detected at concentrations above the reporting limit in 54% of the samples (37 of 68) in 2014; concentrations ranged from <0.005-0.006 mg/L.

1.4.6.11 Nickel

Dissolved nickel was detected at concentrations above the reporting limit (0.002 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable nickel was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014. No samples had total recoverable nickel concentrations exceeding the MDEQ [2012a] standards.

1.4.6.12 Selenium

Dissolved selenium was detected at concentrations above the reporting limit (0.001 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable selenium was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014. No samples had total recoverable selenium concentrations exceeding the MDEQ [2012a] standards.

1.4.6.13 Silver

Dissolved silver was detected at concentrations above the reporting limit (0.0002 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable silver was detected at concentrations above the reporting limit in 9% of the samples (6 of 68) in 2014; concentrations ranged from <0.0002-0.0005 mg/L. No samples had total recoverable silver concentrations exceeding the MDEQ [2012a] standards.

1.4.6.14 Uranium

Dissolved uranium was detected at concentrations above the reporting limit (0.0002 mg/L) in 100% of the samples (68 of 68) collected in 2014; concentrations ranged from 0.0003-0.0069 mg/L.

Total recoverable uranium was detected at concentrations above the reporting limit in 100% of the samples (68 of 68) in 2014; concentrations ranged from 0.0004-0.0073 mg/L. No samples had total recoverable uranium concentrations exceeding the MDEQ [2012a] standards.

1.4.6.15 Vanadium

Dissolved vanadium was detected at concentrations above the reporting limit (0.1 mg/L) in 0% of the samples (0 of 68) collected in 2014.

Total recoverable vanadium was detected at concentrations above the reporting limit in 0% of the samples (0 of 68) in 2014.

1.4.7 Data Validation

Data quality objectives (DQOs) were evaluated for accuracy and precision. These DQOs were largely met in 2014, with a few exceptions. To evaluate sampling accuracy and the extent to

which the field techniques may have contaminated the samples, analyte concentrations were measured in field blanks. Fifty six analytes were analyzed in eight separate field blank samples in 2014. Of the 448 analyte concentrations in those field blanks, 3.6% (16 of 448) of the analytes had concentrations equal to or greater than the respective analytical reporting limits. Aluminum was detected in 12.5% (1 of 8) of the total recoverable aluminum field blank samples with a concentration of 0.016 mg/L (RL = 0.009 mg/L). Dissolved barium was detected in 63% (5 of 8) of the field blank samples; detectable concentrations ranged from 0.004-0.020 mg/L (RL = 0.003 mg/L). Chloride was detected in 25% (2 0f 8) of the field blank samples; detectable chloride concentrations were 6 mg/L and 85 mg/L (RL = 1 mg/L). Iron was detected in 12.5% (1 of 8) of the total recoverable iron field blank samples with a concentration of 0.04 mg/L (RL = 0.02 mg/L). Dissolved zinc was detected in 88% (7 of 8) of the field blanks samples; detectable dissolved zinc concentrations in field blanks ranged from 0.009-0.021 mg/L.

To evaluate sampling precision, paired field sample and field duplicate concentrations were compared. In each pair, fifty six analytes were analyzed in seven separate field sample and field duplicate pairs in 2014. In total, there were 382 sample and duplicate pairs. Of those pairs, 47% (179 of 382) had concentrations which were ≥500% of the analytical reporting limit (RL) and relative percent difference (RPD) comparisons were made between the field sample and duplicate sample for those 179 analyte pairs. Ten of the 179 (5.6%) had RPDs greater than the DQO specified for sampling precision (25%). Analyte pairs with RPDs greater than 25% included total recoverable aluminum (two pairs with RPDs of 25% and 32%), total recoverable copper (one pair with RPD of 67%), total recoverable iron (one pair with RPD of 25%), total recoverable lead (one pair with RPD of 38%), total recoverable mercury (two pairs with RPD of 36% and 36%), total nitrogen (one pair with RPD of 27%), and total suspended sediment (two pairs with RPDs of 38% and 39%).

1.5 DISCUSSION

The SSTOU remedy is intended to remove threats to human health and the environment posed by mining related contaminants within the floodplain of Silver Bow Creek. As of December 2014, remedial measures have been implemented at most of the SSTOU. In 2014, major remedial activities were ongoing only in Subarea 3. This monitoring report represents a continuing assessment of post-remediation conditions present during the 2014 calendar year in the SSTOU and at sample sites outside the SSTOU.

1.5.1 Streamflows

Concentrations of metals and other contaminants in Silver Bow Creek appear to be strongly influenced by streamflows. Concentrations of metals and some nutrients appeared to increase in relation to streamflow, particularly in relation to snowmelt runoff and rainfall. Influences of point source discharges, such as the Butte WWTP discharge, on instream water quality may decrease in the presence of elevated streamflows. Thus, streamflows during and immediately prior to monitoring events are an important factor influencing water quality conditions.

During the 2014 monitoring year, streamflows were variable compared to long-term records ranging from average to well-above average streamflows depending on the time of year. Streamflows were normal in January and February, well above average from March through May due to a winter thaw event that produced unusually high streamflows (particularly in March), and an earlier than normal spring snowmelt producing peak streamflows in mid-May. Streamflows were variable, but more or less normal, from June through July, and above normal in the mid-August through October period. Quarterly monitoring events in 2014 took place in late March during declining streamflows, early June within ten days of the peak snowmelt hydrograph, early September as streamflows were falling, and early December under relatively stable and normal streamflow conditions.

It is not known if some variation in streamflows observed between sites during given sample periods were due to losing or gaining stream segments (e.g., groundwater exchange), irrigation diversions, fluctuating streamflows induced by the Butte WWTP discharge in relation to sampling times, error in streamflow gauging precision, or a combination of these factors.

1.5.2 Field Parameters

1.5.2.1 Water Temperature

Differences in water temperature between the SSTOU monitoring sites were likely influenced by the monitoring sequence and the time of day that measurements were taken at each site. Water temperatures in the SSTOU in 2014 were consistently below 20 C. Highest water temperatures during the four quarterly monitoring events were observed most frequently in Q2. The Butte wastewater treatment plant (WWTP) and German Gulch inflows appeared to influence water temperatures in the Silver Bow Creek mainstem on a seasonal basis. During the Q4 monitoring event, water temperatures in Silver Bow Creek were nearly 3 C warmer downstream from the WWTP outfall than immediately upstream from the outfall. Water temperatures in Silver Bow Creek downstream from the German Gulch confluence were 2.5 C to 5.5 C cooler than immediately upstream from the confluence in Q1 and Q2.

Although the temperatures observed during the 2014 sampling events do not indicate stressful conditions for salmonids and other cold-water organisms, hourly temperature monitoring in Silver Bow Creek by Montana Fish Wildlife and Parks (see Section 6) indicate that water temperatures in Silver Bow Creek during the summer commonly exceed 20 C and occasionally exceed 25 C. Therefore, it is important to recognize the limitations of the data included in this report in describing spatial temperature trends.

1.5.2.2 Acidity

All pH measurements in the SSTOU in 2014 were within the 6.5–9.5 range which is the goal for I-classification streams. Highest pH values and greatest variability among sites occurred in Q3 when water temperatures were warmer, contributing to greater metabolic activity of aquatic plants. The lowest pH values were recorded in German Gulch and in Silver Bow Creek at

Frontage Road during Q2. Seasonally, the lowest pH values and the smallest variability between stations were observed during Q2. Stream pH was somewhat higher in Silver Bow Creek above the Butte WWTP compared to adjacent sites, likely in response to lime additions to the Butte treatment lagoons which discharge just upstream of the Butte WWTP. Field pH values measured during the four quarterly monitoring events in 2014 showed similar variability to that in 2013. Inter-site differences in pH were also influenced by the sampling time of day.

1.5.2.3 Conductivity

Elevated conductivity may indicate excessive concentrations of dissolved solids which may limit some beneficial uses of water (e.g., irrigation or drinking water). Low conductivity is typically related to watershed geology and may indicate low productivity of associated biological systems. Conductivity tends to be inversely related to streamflow due to dilution.

The highest conductivities at all of the SSTOU monitoring stations were observed during the Q4 monitoring event when streamflows were at a winter base streamflow level. Lowest conductivities at all stations were observed in Q2, during snowmelt runoff conditions. Conductivity tended to increase gradually from the upper-most monitoring station, Blacktail Creek at Father Sheehan Park, downstream to below the Butte WWTP then remained more or less static to German Gulch. Below the German Gulch confluence a decrease in conductivity occurred at the four downstream Silver Bow Creek monitoring stations.

1.5.2.4 Dissolved Oxygen

All dissolved oxygen concentration measurements were above the 1-day minimum standard for an I-classification stream without juvenile salmonids (3 mg/L; MDEQ [2012a]). However, these results reflect a limitation in this sampling design because no sampling occurs during the night. Several recent studies have demonstrated that Silver Bow Creek is severely hypoxic (dissolved oxygen <2 mg/L) during summer nights [Plumb, 2009; Gammons et al., 2011; Naughton, 2013]. The hypoxia is most likely caused by ammonia-rich effluent from the Butte WWTP [Gammons et al., 2011] and hypoxia is a primary limiting factor for the recovery of trout in Silver Bow Creek [Naughton, 2013].

1.5.2.5 Turbidity and Suspended Sediment

Total suspended sediment (TSS) concentrations at SSTOU monitoring stations in 2014 showed apparent positive correlations to turbidity and to many of the COC concentrations. The highest turbidity and total suspended sediment concentrations at individual SSTOU monitoring stations in 2014 were measured in either Q2 (during spring runoff) or Q4. During Q4, turbidity was elevated at all Silver Bow Creek monitoring stations from above Sand Creek to Miles Crossing. Readings were particularly high at the Silver Bow Creek site in Reach L and at Miles Crossing (22.1 and 36.8 NTU, respectively), and represented the highest values recorded during the four 2014 monitoring events. The source of the elevated Q4 turbidity is unknown but may have resulted from melting stream bottom anchor ice mobilizing decaying aquatic plant

material and associated fine sediment. Anchor ice was observed at downstream monitoring sites early in the day on the first day of the Q4 monitoring event. The ice disappeared at upstream sites monitored later in the same day, and was accompanied by the increased turbidity and suspended sediment, apparently a mix of organic and inorganic particulate matter. There was no readily apparent spatial trend for total suspended sediment concentrations in Silver Bow Creek during the 2014 monitoring events, except that total suspended sediment was usually somewhat lower downstream from the Butte WWTP outfall and downstream from German Gulch than at the immediate upstream sites. Turbidity at SSTOU monitoring stations in 2014 showed a much greater range than in 2013 due to the high Q4 measurements in Silver Bow Creek in Reach L and at Miles Crossing.

1.5.3 Common Ions

Common ions describe the basic water chemistry of the subject water bodies, and certain ions such as sulfate can be used as indicators for the presence of mine related contaminants. Calcium and magnesium ions contribute to water hardness, which helps to buffer the toxic effects of some heavy metals. Aquatic life toxicity standards for cadmium, copper, lead, zinc and other metals are determined on the basis of water hardness. Hardness mitigates metal toxicity by preventing aquatic organisms from absorbing metals. Carbonate and bicarbonate alkalinity contribute to the buffering system of surface waters to resist changes in pH. Levels of water hardness and alkalinity also influence the productivity of aquatic systems. Western freshwater fisheries typically have alkalinity values of 100–200 mg/L.

Water hardness in Silver Bow Creek during 2014 was typically hard to very hard, while water hardness in Blacktail Creek and German Gulch was consistently lower than in Silver Bow Creek. Hardness increased from Blacktail Creek at Father Sheehan Park to the Silver Bow Creek station above Browns Gulch, stabilized downstream to above German Gulch, and then decreased from above to below German Gulch. All of the Silver Bow Creek monitoring stations were classified as either calcium bicarbonate or calcium bicarbonate-sulfate type waters, depending on the season and station, from the standpoint of anionic composition. There was little spatial variation between mainstem SSTOU stations in carbonate and bicarbonate alkalinity. Tributary stations Blacktail Creek and German Gulch had somewhat lower total and bicarbonate alkalinity than mainstem stations. Total and bicarbonate alkalinity increased from above to below the Butte WWTP discharge

Sodium ion concentrations showed the same spatial pattern in each of years 2010-2014, with increases noted from the Blacktail Creek downstream to Browns Gulch area, then stabilizing downstream to the German Gulch confluence. Chloride concentrations were similar to the pattern of sodium concentrations, with increases noted from Blacktail Creek downstream to above Browns Gulch, a decline downstream from Browns Gulch, and then stable conditions downstream to German Gulch. Low sodium and chloride concentrations in German Gulch diluted concentrations in Silver Bow Creek below its confluence. The largest upstream to downstream increases in sodium and chloride concentration in Silver Bow Creek were noted in the reach from below Sand Creek to above Browns Gulch. Consistent increases in chloride concentrations were noted in Silver Bow Creek from above to below the Butte WWTP outfall.

Sulfate concentrations increased several fold in Silver Bow Creek from above the Butte Reduction Works to the station above the Butte WWTP, increased at a lower rate downstream to the above Browns Gulch station, and then stabilized in the segment of Silver Bow Creek extending downstream to the German Gulch confluence. Like the other common ions, sulfate concentrations fell markedly in Silver Bow Creek below German Gulch due to dilution.

1.5.4 Nutrients

Concentrations of nutrients during 2014 were high throughout Silver Bow Creek and regularly exceeded the MDEQ newly adopted summertime nutrient standards for the Middle Rockies Ecoregion [MDEQ, 2014b]. Concentrations were particularly high at monitoring stations located downstream of the Butte WWTP discharge, and nutrient concentrations observed in 2014 were consistent with monitoring in prior years. The German Gulch station had consistently low concentrations of nutrients. Concentrations of total ammonia in Silver Bow Creek intermittently exceeded the chronic ALS for early life stage salmonids at several stations extending in Subarea 1 and 2 as well as in Subarea 3 upstream from German Gulch.

In Q3, total nitrogen concentrations in Silver Bow Creek increased markedly from above to below German Gulch and these elevated concentrations persisted at all downstream sites. The source of this increased total nitrogen is unknown but appears to be related to suspended organic matter in the water column. Field notes, field measurements and lab analysis results indicated increased water cloudiness and turbidity and total suspended sediment at all Subarea 4 monitoring sites. Seasonal sloughing of attached algae and aquatic plants can contribute to elevated water column total nitrogen concentrations. There was no corresponding increase in soluble nitrogen (i.e., nitrate plus nitrite nitrogen) in Silver Bow Creek downstream from German Gulch, which supports the hypothesis that suspended organic particulate matter was responsible for the high total nitrogen values. This pattern was not observed in prior monitoring years or in other quarters of 2014. Rather, total nitrogen concentrations have otherwise declined downstream from German Gulch presumably due to dilution.

Nutrient loading estimates for Silver Bow Creek support the findings of others [Plumb, 2009; Gammons et al., 2011] that the Butte WWTP is the largest source of total nitrogen and total phosphorus downstream of the outfall, but additional smaller scale nutrient sources were evident along Blacktail Creek and Silver Bow Creek both above and below the Butte WWTP.

Total nitrogen, nitrate plus nitrite nitrogen, and total phosphorus concentrations at most monitoring stations showed considerable variability over the four 2014 monitoring events in response to streamflow fluctuations, rates of biological uptake by aquatic plants, and conversion of nitrogen forms below the WWTP discharge.

1.5.5 Contaminants of Concern

The SSTOU remedy is intended to remove threats to human health and the environment posed by the presence of metals-rich tailings within the floodplain of Silver Bow Creek. Currently, the SSTOU remedy is performing reasonably well with respect to attainment of some performance goals for contaminants of concern. Despite continuing improvements, exceedances

of performance goals within the remediated area were frequent for some COCs, particularly total recoverable copper and cadmium. By contrast, the quality of water in German Gulch at the mouth and Blacktail Creek at Father Sheehan Park was good again in 2014. Higher overall streamflows likely influenced COC concentrations and loads in 2014. Overall, the frequency and magnitude of exceedances of the ALS for the metal COCs were higher throughout Silver Bow Creek in 2014 than in 2013.

Of the SSTOU monitoring stations in 2014, copper showed the highest frequency (75%) of exceedances of the performance goals followed by mercury (62%), cadmium (25%), lead (10%), arsenic (9%), and zinc (3%). The highest frequencies of COC performance goal exceedances occurred at the site at the lower end of Subarea 4 near Opportunity at Stewart Street (SS-17D; Figure 1-2). However, COC concentrations have been consistently reduced at SS-17D in recent years and COC concentrations more similar to upstream sites in 2014. In addition, the Subarea 3 site SS-15A [Figure 1-2] had similar COC concentrations to other sites in 2014 whereas in prior years COC concentrations at SS-15A were often quite elevated. The decreased magnitude of COC concentrations at SS-15A appears to be related to remedial actions that have been completed in Subarea 3 upstream from the site.

Temporal trends for the COC metals indicate continuing positive progress in reducing instream concentrations in Silver Bow Creek since 2005, particularly at the station below Stewart Street at Opportunity (SS-17D; Figure 1-2). Remediation activities and channel reconstruction was largely completed in Subarea 4 as of 2014. Overall, compliance ratios have decreased markedly over the 10-year period examined.

As in prior years of monitoring, during base streamflow periods in 2014, COC (particularly copper and zinc) concentrations increased incrementally through Subarea 1 before generally leveling off through the remainder of the SSTOU. These results suggest that COC sources remain upstream from the SSTOU and in Subarea 1. Water in Silver Bow Creek entering the SSTOU had detectable copper concentrations at all sites in all sample periods and, in Q2 2014, all sample sites upstream from the SSTOU had copper concentrations exceeding MDEQ [2012a] standards. Moreover, copper concentrations above the SSTOU (SS-01, SS-05A, SS-06G; Figure 1-2) generally increased at each downstream site during all sample periods indicating that copper loading occurs in Butte even during non-runoff periods. In Subarea 1, COC loading may be related to groundwater inputs (although streamflows do not increase substantially through Subarea 1) or from remaining tailings deposits in the Subarea 1 floodplain. Planned remedial actions are intended to remedy some of the remaining tailings deposits in Subarea 1 and Subarea 2.

Arsenic concentrations and load estimates in 2014 suggested that minor, diffuse arsenic sources occur within the Silver Bow Creek stream segment in Subarea 1 and the upstream half of Subarea 2. Browns Gulch appeared to be a more substantial arsenic point-source. German Gulch streamflows appeared to dilute arsenic concentrations in the mainstem. Some remedial actions occurred in the lower portion of German Gulch recently and these actions may reduce arsenic loading from German Gulch. However, arsenic concentrations in German Gulch (monitored since 2007) have generally been near or below the reporting limit (0.005 mg/L) Therefore, at this time it is not clear from the data if the remedial actions in German Gulch

have resulted in reduced arsenic concentrations in German Gulch or in Silver Bow Creek. In 2014, the analytical reporting limit for arsenic was reduced to 0.001 mg/L and this lower reporting limit will allow for improved resolution of temporal trends at this site through time.

In 2014, generally the greatest magnitude of exceedances occurred in sample sites at the downstream end of Subarea 2 (SS-13 and SS-14; Figure 1-2) in Q4. During that sampling event elevated turbidity and suspended sediment concentrations were also observed at those sites. Excluding SS-13, turbidity and total suspended sediment concentrations were nearly 400% higher at SS-14 in Q4 than at any other site and turbidity and total suspended sediment were approximately 200% higher at SS-13 than at all other sites (not including SS-14). These elevated turbidity and suspended sediment concentrations declined sharply downstream from SS-14 in Q4 suggesting that the source of these suspended sediments was located upstream from SS-13 but that these sediments were deposited in the stream channel somewhere between SS-14 and SS-15A [Figure 1-2]. The suspended sediment concentrations in lower Subarea 2 may be related to the input of Browns Gulch water, which is known to be sediment-rich [Schmidt et al., 2014]. However, these elevated turbidity and suspended sediment conditions were not observed during the spring snowmelt period (Q2) when the influence of Browns Gulch would likely be greatest. This suggests that the source of the suspended sediment was within Silver Bow Creek or the adjacent floodplain.

We believe winter sloughing of aquatic plants and algae may be related to the elevated suspended sediment and COC concentrations in the stream channel at the lower end of Subarea 2. Large crops of aquatic plants and algae occur in Silver Bow Creek throughout Subarea 1 and 2 during the summer as a result of nutrient enrichment from the Butte WWTP [Gammons et al., 2011]. These large volumes of organic materials may retain water-borne and sediment-associated metals and as the organic materials die, decay, and slough into the stream channel during the winter, total recoverable COC concentrations become elevated. To investigate the hypothesis that variation in suspended sediment (and potentially COC) concentrations is related to sloughing organic material, we recommend monitoring volatile suspended sediment in addition to total suspended sediment. Volatile suspended sediment, measures the mass of combustible material in the suspended sediment sample and provides an approximation of the concentration of organic material in the sample. Although this method may slightly overestimate the proportion of organic material in the sample, because some inorganic material (mineral salts) may also be volatilized through the combustion process [Spellman, 2014], it will provide insight into the variability in the concentration of organic material suspended in the water column spatially and temporally and the extent to which those conditions may be related to variation in COC concentrations.

1.5.6 Other Metals

No surface water samples exceeded MDEQ [2012a] standards for any non-COC metal with the exception of iron. Iron concentrations exceeded the standard at two sites in Silver Bow Creek located upstream from SSTOU (SS-05A and SS-06G; Figure 1-2) in Q2 and at two sites near the downstream end of Subarea 2 (SS-13 and SS-14D; Figure 1-2) in Q4. The timing and

location of elevated iron concentrations in the SSTOU in Q4 corresponded with elevated turbidity, suspended sediment, and other COC concentrations.

1.5.7 Data Validation

All data derived from laboratory analysis of surface water were validated through field quality control and laboratory quality control procedures. A completed quality assurance and quality control checklist, summary tables of field duplicate and field blank results, and assessments of data quality objectives are included in Appendix A.

There were generally few detections of any analytes in field blanks suggesting that the field techniques introduced little contamination into the samples. However, one exception was dissolved zinc which was detected in 88% of the field blank samples, although at low concentrations (≤0.021 mg/L) relative to the performance goal (0.120 mg/L at water hardness of 100 mg/L). The consistency with which the field blanks were contaminated by dissolved zinc implies that the field technique introduces a positive bias into the samples (i.e., actual dissolved zinc concentrations in the stream at the site samples were probably slightly lower than the concentrations in the samples). We suspect that the disposable membrane discs used to filter the dissolved samples were likely responsible for the zinc contamination in the dissolved samples despite rinsing of each filter with one syringe volume (60 mL) of deionized water and one volume of sample water prior to filtration of each sample. Although contamination of dissolved zinc is a concern, the performance goal for zinc is based on total recoverable (i.e., unfiltered) concentrations and therefore contamination of the total recoverable samples by the filter membranes would not have occurred. No field blanks had total recoverable zinc concentrations above the reporting limit suggesting that contamination of those samples was minimal.

In addition to the dissolved zinc contamination in the field blanks, two field blanks had chloride concentrations above the reporting limit and one had a concentration of 86 mg/L, which was 86 times greater than the reporting limit. We believe that inadequate rinsing of the hydrochloric acid solution used during equipment decontamination procedures between samples was the cause of these elevated chloride concentrations in the field blanks. After the Q1 monitoring event, no additional field blanks had detectable chloride concentrations.

There were relatively few exceedances of the data quality objective for sampling precision (i.e., paired sample and duplicate RPDs <25%) and there did not appear to be a systematic trend in which particular metals were more likely to exceed the data quality objective for sampling precision. However, total recoverable samples were more likely to exceed the data quality objective for sampling precision than dissolved samples; there were no exceedances of the sampling precision data quality objective for any dissolved analytes.

2.0 SEDIMENT

2.1 INTRODUCTION

The Streamside Tailings Operable Unit (SSTOU) Record of Decision (ROD) did not specify numeric remediation standards for concentrations of contaminants of concern in instream sediment, stating "No metals concentration cleanup goal is established by this action" [MDEQ and USEPA, 1995]. The 1998 Explanation of Significant Differences (ESD) [MDEQ and USEPA, 1998] modified the sediment goals to recognize that the realignment and reconstruction of the stream channel in many areas provided for the streambed to be reconstructed with clean materials. In those areas where the existing channel was to be maintained, the sediments would be excavated to a minimum depth of 1 foot and the new channel bed reconstructed with clean fill material. Thus the contaminated sediments were replaced with clean material throughout the operable unit.

2.2 REFERENCE VALUES

To evaluate the influence of remediation and extent of recontamination from upstream on sediment COC concentrations in instream sediments ecological reference values have been selected. These reference values are the "threshold effect concentration" (TEC) and the "probable effect concentration" (PEC), which are consensus-based sediment quality guidelines for benthic organisms [MacDonald et al., 2000]. At metal COC concentrations above the TEC, benthic organisms may be affected by that COC. At metal COC concentrations above the PEC, benthic organisms are likely to be affected by that COC [Table 2-1].

Table 2-1. Reference values for contaminant of concern concentrations (dry weight [DW]) of instream sediments in the Streamside Tailings Operable Unit. The threshold effect concentration (TEC) and probable effect concentration (PEC) were described in MacDonald et al. [2000].

Contaminant of Concern	Threshold of Effect Concentration (mg/kg-DW)	Probable Effect Concentration (mg/kg-DW)
Arsenic	9.79	33
Cadmium	0.99	4.98
Copper	31.6	149
Lead	35.8	128
Mercury	0.18	1.06
Zinc	121	459

2.3 METHODS

The purpose of the instream sediment monitoring program is to collect data describing the temporal and spatial variation of COC concentrations in the SSTOU. These data provide a long-term record of environmental conditions in the SSTOU. This long-term record provides a dataset to evaluate the effect of remediation on environmental conditions in the SSTOU over time. Changes to the sediment monitoring program have occurred over time and a record of these changes is provided in the project sampling and anlysis plan [Naughton et al., 2014a]. The program attempts to fully adhere to monitoring requirements specified in the SSTOU ROD [Table 2-2].

Table 2-2. Minimum post-remedy instream sediment monitoring requirements specified in the Record of Decision for the Streamside Tailings Operable Unit [MDEQ and USEPA, 1995].

Locations/Physical	Analytical Parameters	Analytes
Surface water locations and at each depositional area.	Metals (total) in three size fractions: <0.065 mm, 0.065-1 mm, 1-2 mm	Arsenic, cadmium, copper, lead, mercury, zinc

2.3.1 Monitoring Locations

In 2014, remediation in the SSTOU was completed in all of Subareas 1, 2, and 4. Remediation was in progress in portions of Subarea 3 downstream from SS-15B [Figure 2-1]. Monitoring was conducted at 17 sites in 2014, 13 of which were located within the SSTOU. Locations of some sampling sites were selected based on SSTOU ROD requirements [Table 2-2]. Other sites were selected to provide greater spatial resolution or to assess the influence of specific sediment inputs. Sites located outside the SSTOU were sampled to describe instream sediment conditions in portions of Silver Bow Creek and Blacktail Creek immediately upstream from the SSTOU (SS-01, SS-05A, SS-06G), and in a major tributary (German Gulch) entering Silver Bow Creek within the SSTOU (SS-15G) [Figure 2-1].

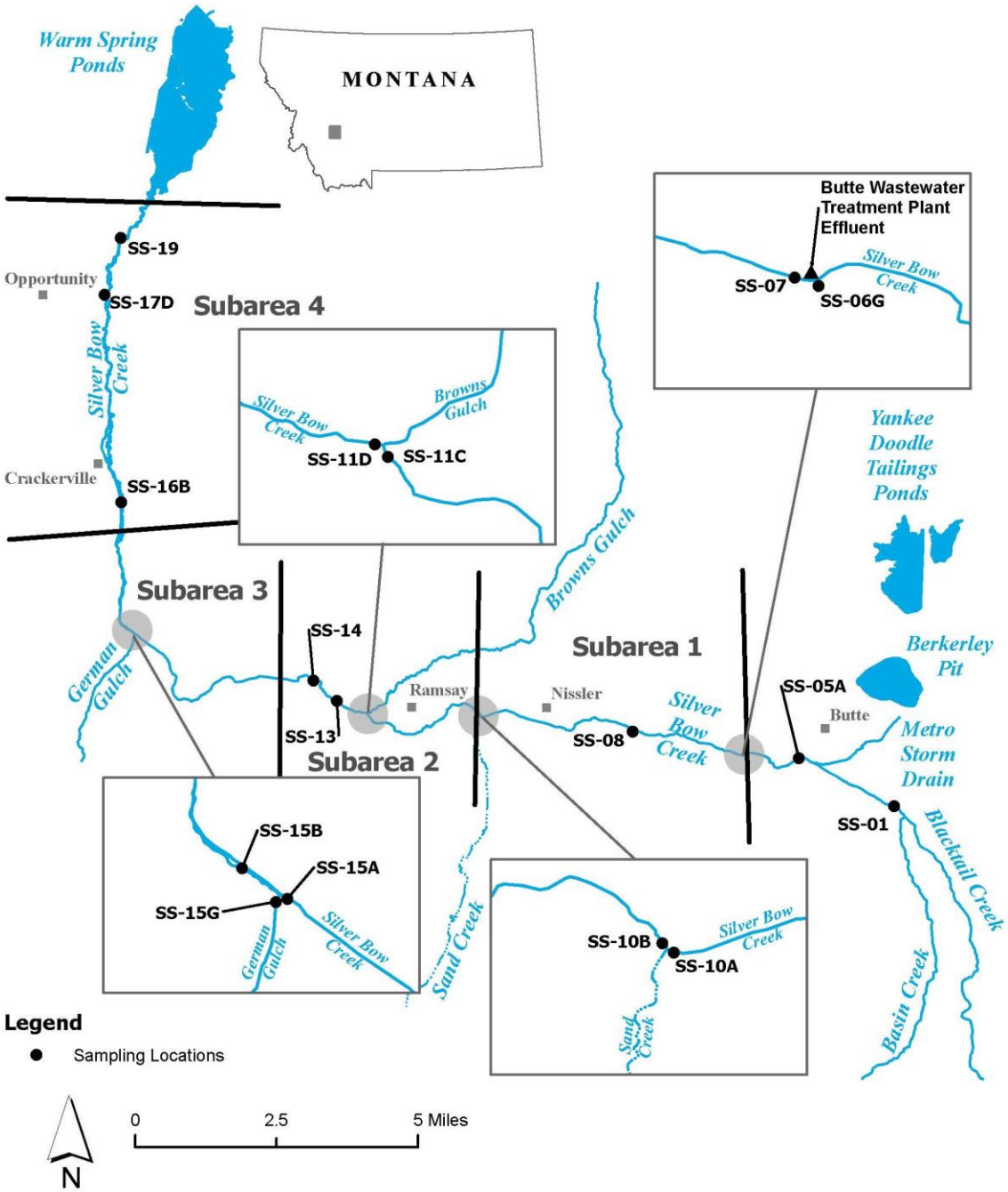

Figure 2-1. Instream sediment sampling locations in the Streamside Tailings Operable Unit, 2014.

Table 2-3. Instream sediment sampling locations in the Streamside Tailings Operable Unit, 2014.

Site ID	Site Location	Location (GPS coordinates, NAD 83)	
		Latitude	Longitude
SS-01	Blacktail Creek at Father Sheehan Park	45.98532	-112.50772
SS-05A	Silver Bow Creek above Butte Reduction Works	45.99653	-112.54343
SS-06G	Silver Bow Creek above WWTP	45.99458	-112.55146
SS-07[10]	Silver Bow Creek below WWTP	45.99648	-112.56316
SS-08	Silver Bow Creek at Rocker	45.99679	-112.56470
SS-10A	Silver Bow Creek above Sand Creek	46.00167	-112.60490
SS-10B	Silver Bow Creek below Sand Creek	46.00375	-112.66084
SS-11C	Silver Bow Creek above Browns Gulch	46.00429	-112.66160
SS-11D	Silver Bow Creek below Browns Gulch	46.00336	-112.70172
SS-13	Silver Bow Creek in Reach L	46.00342	-112.70304
SS-14	Silver Bow Creek at Miles Crossing	46.00647	-112.71394
SS-15A	Silver Bow Creek above German Gulch	46.01142	-112.72270
SS-15B	Silver Bow Creek below German Gulch	46.02170	-112.78969
SS-15G	German Gulch near confluence	46.02263	-112.79175
SS-16	Silver Bow Creek in Reach P near Fairmont	46.02170	-112.79029
SS-17D[11]	Silver Bow Creek below Stewart Street at Opportunity	46.05494	-112.79611
SS-19	Silver Bow Creek at Frontage Road	46.10787	-112.80553

2.3.2 Monitoring Schedule

Monitoring events were scheduled seasonally to describe seasonal variation in water chemistry within the SSTOU. One monitoring event occurred during each calendar quarter. Quarterly monitoring events occurred near the end of each quarter. First quarter (Q1) monitoring occurred from March 24–25 prior to spring snowmelt runoff. Second quarter (Q2) monitoring occurred from June 2-3, approximately at the peak of the spring snowmelt runoff period. Third quarter (Q3) monitoring occurred from September 9-11 during low streamflow conditions. Fourth quarter (Q4) monitoring occurred from December 3-4, during late fall.

2.3.3 Monitoring Parameters

Instream sediment samples were analyzed for total extractable concentrations of COCs (arsenic, cadmium, copper, lead, mercury, and zinc) and other metals (aluminum, antimony, barium, beryllium, boron, chromium, cobalt, iron, manganese, molybdenum, nickel, selenium, silver, uranium, and vanadium).

[10] Co-located with USGS streamflow gauge 12323250.

[11] Co-located with USGS streamflow gauge 12323600.

In 2014, the analytical laboratory determined the water saturation percentage of each sediment sample to determine dry weight (DW) and wet weight (WW) analyte concentrations. Prior to 2010, all SSTOU sediment samples were analyzed on a DW basis. However, from 2010-2013, all sediment samples were evaluated on the WW basis. Wet weight analyte concentrations are lower than dry weight analyte concentrations because the drying process reduces the total mass of the sample without reducing the mass of the analyte. The TEC and PEC goals are expressed on a DW basis and only DW analyte concentrations will be used to evaluate exceedances of these reference values. Unfortunately, comparison of pre-2010 (DW) and 2010-2013 (WW) analyte concentrations at sites in the SSTOU will be confounded by the difference in analytical methods. By evaluating both WW and DW concentrations in 2014, data have been compiled to allow for analysis of correlations between WW and DW concentrations at each site. These WW and DW relationships provide some ability to adjust WW concentrations from 2010-2013 to a DW scale in order to make comparisons between pre-2010 DW concentrations and 2010-2013 WW concentrations. However, these relationships will be imprecise and subject to some range of error. Approximate DW concentrations, estimated from site specific WW and DW correlations, should always be interpreted with caution and would not be appropriate for evaluation of regulatory standards.

2.3.4 Sample Collection and Analysis

Sample collection and analysis procedures are described in the project sampling and analysis plan (SAP) [Naughton et al., 2014a] and quality assurance and quality control procedures are described in the program quality assurance project plan (QAPP) [Naughton et al., 2014b]. Sample collection methods generally followed standard operating procedures (SOPs) developed for the Clark Fork River [AR, 1992]. Composite sediment samples were collected from at least five depositional areas in the stream according to Montana Department of Environmental Quality standard operating procedures (SOPs) [MDEQ, 2012b]. Sediment collection methods were altered between 2010 and 2011 [DeArment et al., 2010; 2011a] to maximize the proportion of each sample with fine grained sediment (≤2 mm). Each composite sample was wet sieved in the laboratory into three sediment size fractions: <0.065 mm, 0.065–1 mm, and 1–2 mm. Samples were analyzed by size fraction at Energy Laboratories (Helena, Montana). Laboratory analysis procedures included SW 6010B, SW 6020, SW 7471A, or SW7471B [Table 2-4]

Table 2-4. Analytes and analytical methods for instream sediment monitoring in the Streamside Tailings Operable Unit, 2014.

Parameter	Category	Analytical Method
Arsenic	Contaminants of concern	SW6010B
Cadmium		SW6020
Copper		SW6010B
Lead		SW6010B
Zinc		SW6010B
Mercury		SW7471B
Aluminum	Other metals	SW6010B
Antimony		SW60120
Barium		SW6010B
Beryllium		SW6010B
Boron		SW6010B
Chromium		SW6010B
Cobalt		SW6010B
Iron		SW6010B
Manganese		SW6010B
Molybdenum		SW6020
Nickel		SW6010B
Selenium		SW6020
Silver		SW6020
Uranium		SW6020
Vanadium		SW6010B

2.3.5 Data Analysis

Data were analyzed to assess spatial and temporal patterns in sediment metal and arsenic concentrations. In addition, metal and arsenic concentrations at each sample site were compared to reference values [Table 2-1] to assess exceedances. Sediment metal concentrations were evaluated in three size fractions (<0.065 mm, 0.065-1 mm, 1-2 mm). In addition to these separate size fractions, a proportional concentration (i.e., the weighted mean) has been calculated for each COC in each sample among the three size fractions analyzed for each COC metal. The weighted mean concentrations were computed for each COC metal from the analysis results for the three individual sediment size fractions on the basis of the relative percent, by weight, that each size fraction contributed to the total sample weight.

For each COC, concentrations for the finest size fraction (<0.065 mm) and the weighted mean concentration for each COC are plotted in a histogram to compare variation among stations and by sample period. Histograms for each COC include results for each of the four 2014 quarterly monitoring events. Data collected in this monitoring program has consistently demonstrated that sediment COC concentrations are highest in the smallest size fraction (<0.065 mm).

To allow comparison of samples analyzed as only DW concentrations (all SSTOU samples from 2002-2009) to those analyzed as only WW concentrations (all SSTOU samples from 2010-2013), samples in 2014 were analyzed as both DW and WW concentrations in 2014. The relationship between WW and DW concentrations were fit by simple linear regression for each COC in each size fraction. To increase statistical power, data included in these regressions

included all samples collected in the SSTOU and all samples collected in the Clark Fork River Operable Unit (CFROU) in 2014. In total, there were 74 WW and DW sample pairs in each of the mid (0.065-1 mm) and coarse (1-2 mm) size fractions (collected from 17 sites all in the SSTOU) and 102 sample pairs in the fine (<0.065 mm) size fraction (collected from 30 sites in both the SSTOU and CFROU). Sample collection and analysis methods for the CFROU were essentially the same as those used in the SSTOU with the exception that only the smallest size fraction (<0.065 mm) was analyzed in the CFROU [Naughton et al., 2014c]. All WW and DW concentrations were $\log_{10}$ transformed to improve the linear fit and reduce heteroscedasticity (i.e., non-constant variance). The fitted linear relationships for each COC in each size fraction was subsequently used to estimate DW concentrations from the WW sample results for the 2010-2014 time period. All measured DW COC concentrations in each size fraction were then plotted at each site in the SSTOU through the period of record (2002-2014) and the estimated WW concentrations for the 2010-2014 period were included in these plots to evaluate temporal trends by site and by size fraction.

2.3.6 Data Validation

Data quality objectives (DQOs) were established in the SSTOU QAPP for "data representativeness", "comparability", "completeness", "sensitivity", "precision", "bias", and "accuracy" [Naughton et al., 2014b]. Methods for field and laboratory QA/QC procedures are also described in detail in the project QAPP. A completed QA/QC checklist, summary tables of field duplicate and field blank results, and assessments of data quality objectives are included in Appendix A. Results from the analytical laboratory are included in Appendix B. The 2014 sediment monitoring data are included in Appendix D

Variability in sediment metals concentrations among samples was assessed by comparing field duplicate samples to field samples. Field duplicate samples were collected at the same location and at the same time as field samples and were processed and analyzed by the same methods. The relative percent difference (RPD) between the concentration in the field duplicate and field sample pair was determined for each metal. Two field duplicate samples were collected during each sampling event and RPD statistics were calculated for each field duplicate and field sample pair.

2.4 RESULTS

2.4.1 Sample Size Fraction

The proportion of sediment by size fraction in each sample for 2014 is displayed in Table 2-5.

Table 2-5. Proportion of each sediment sample in four size fractions in the Streamside Tailings Operable Unit, 2014.

Site ID	Location	Proportion of sample in size fraction (%)			
		<0.065 mm	0.065–1 mm	1–2 mm	>2 mm
First Quarter					
SS-01	Blacktail Creek at Father Sheehan Park	3	58	18	21
SS-05A	Silver Bow Creek above Butte Reduction Works	2	46	25	27
SS-06G	Silver Bow Creek above WWTP	11	26	24	39
SS-07	Silver Bow Creek below WWTP	24	30	12	34
SS-08	Silver Bow Creek at Rocker	1	11	72	16
SS-10A	Silver Bow Creek above Sand Creek	24	32	29	14
SS-10B	Silver Bow Creek below Sand Creek	12	24	32	32
SS-11C	Silver Bow Creek above Browns Gulch	3	30	33	34
SS-11D	Silver Bow Creek below Browns Gulch	3	28	22	46
SS-13	Silver Bow Creek in Reach L	5	50	27	19
SS-14	Silver Bow Creek at Miles Crossing	5	52	17	26
SS-15A	Silver Bow Creek above German Gulch	12	47	31	11
SS-15B	Silver Bow Creek below German Gulch	4	34	9	53
SS-15G	German Gulch near confluence	3	38	32	28
SS-16	Silver Bow Creek in Reach P near Fairmont	2	48	25	25
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	1	22	33	44
SS-19	Silver Bow Creek at Frontage Road	5	75	9	12
Second Quarter					
SS-01	Blacktail Creek at Father Sheehan Park	2	49	18	31
SS-05A	Silver Bow Creek above Butte Reduction Works	3	34	17	46
SS-06G	Silver Bow Creek above WWTP	5	30	35	30
SS-07	Silver Bow Creek below WWTP	2	50	37	11
SS-08	Silver Bow Creek at Rocker	5	13	33	50
SS-10A	Silver Bow Creek above Sand Creek	18	31	7	43
SS-10B	Silver Bow Creek below Sand Creek	14	36	15	35
SS-11C	Silver Bow Creek above Browns Gulch	9	19	11	61
SS-11D	Silver Bow Creek below Browns Gulch	5	42	19	34
SS-13	Silver Bow Creek in Reach L	10	27	22	41
SS-14	Silver Bow Creek at Miles Crossing	9	32	11	49
SS-15A	Silver Bow Creek above German Gulch	9	39	18	33
SS-15B	Silver Bow Creek below German Gulch	3	91	1	5
SS-15G	German Gulch near confluence	7	57	14	23

SS-16	Silver Bow Creek in Reach P near Fairmont	7	66	13	14
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	20	55	11	13
SS-19	Silver Bow Creek at Frontage Road	8	66	9	18
Third Quarter					
SS-01	Blacktail Creek at Father Sheehan Park	2	50	25	24
SS-05A	Silver Bow Creek above Butte Reduction Works	6	41	13	41
SS-06G	Silver Bow Creek above WWTP	2	41	40	18
SS-07	Silver Bow Creek below WWTP	2	31	26	40
SS-08	Silver Bow Creek at Rocker	2	23	39	36
SS-10A	Silver Bow Creek above Sand Creek	12	34	11	44
SS-10B	Silver Bow Creek below Sand Creek	6	20	23	52
SS-11C	Silver Bow Creek above Browns Gulch	3	17	26	54
SS-11D	Silver Bow Creek below Browns Gulch	3	28	23	46
SS-13	Silver Bow Creek in Reach L	5	27	18	50
SS-14	Silver Bow Creek at Miles Crossing	9	36	19	36
SS-15A	Silver Bow Creek above German Gulch	2	41	23	35
SS-15B	Silver Bow Creek below German Gulch	2	38	16	44
SS-15G	German Gulch near confluence	1	29	41	28
SS-16	Silver Bow Creek in Reach P near Fairmont	4	73	9	14
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	1	54	37	8
SS-19	Silver Bow Creek at Frontage Road	2	18	51	30
Fourth Quarter					
SS-01	Blacktail Creek at Father Sheehan Park	2	66	26	6
SS-05A	Silver Bow Creek above Butte Reduction Works	4	53	19	25
SS-06G	Silver Bow Creek above WWTP	2	23	60	16
SS-07	Silver Bow Creek below WWTP	5	42	28	25
SS-08	Silver Bow Creek at Rocker	15	36	19	30
SS-10A	Silver Bow Creek above Sand Creek	8	31	19	41
SS-10B	Silver Bow Creek below Sand Creek	5	44	11	40
SS-11C	Silver Bow Creek above Browns Gulch	2	16	21	61
SS-11D	Silver Bow Creek below Browns Gulch	10	42	12	35
SS-13	Silver Bow Creek in Reach L	17	28	20	35
SS-14	Silver Bow Creek at Miles Crossing	4	23	16	58
SS-15A	Silver Bow Creek above German Gulch	2	14	16	68
SS-15B	Silver Bow Creek below German Gulch	---	---	---	---
SS-15G	German Gulch near confluence	2	44	37	18
SS-16	Silver Bow Creek in Reach P near Fairmont	2	35	13	50
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	4	31	30	35
SS-19	Silver Bow Creek at Frontage Road	---	---	---	---

--- Not sampled.

2.4.2 Comparison of Wet Weight and Dry Weight Concentrations

Following $\log_{10}$ transformation, the fit between the wet weight and dry weight concentrations for all COCs in all size fractions appeared to be linear, homoscedastic (i.e., had constant variance), and residuals appeared to be normally distributed [Figure 2-2]. Given that these assumptions of linear regression appeared to be satisfied, simple linear regression models were fit for each COC in each size fraction [Table 2-6]. The fitted relationships between WW and DW concentrations were quite good for all COCs in all size fractions; *r*-squared values ranged from 0.757-0.966 (mean *r*-squared = 0.918).

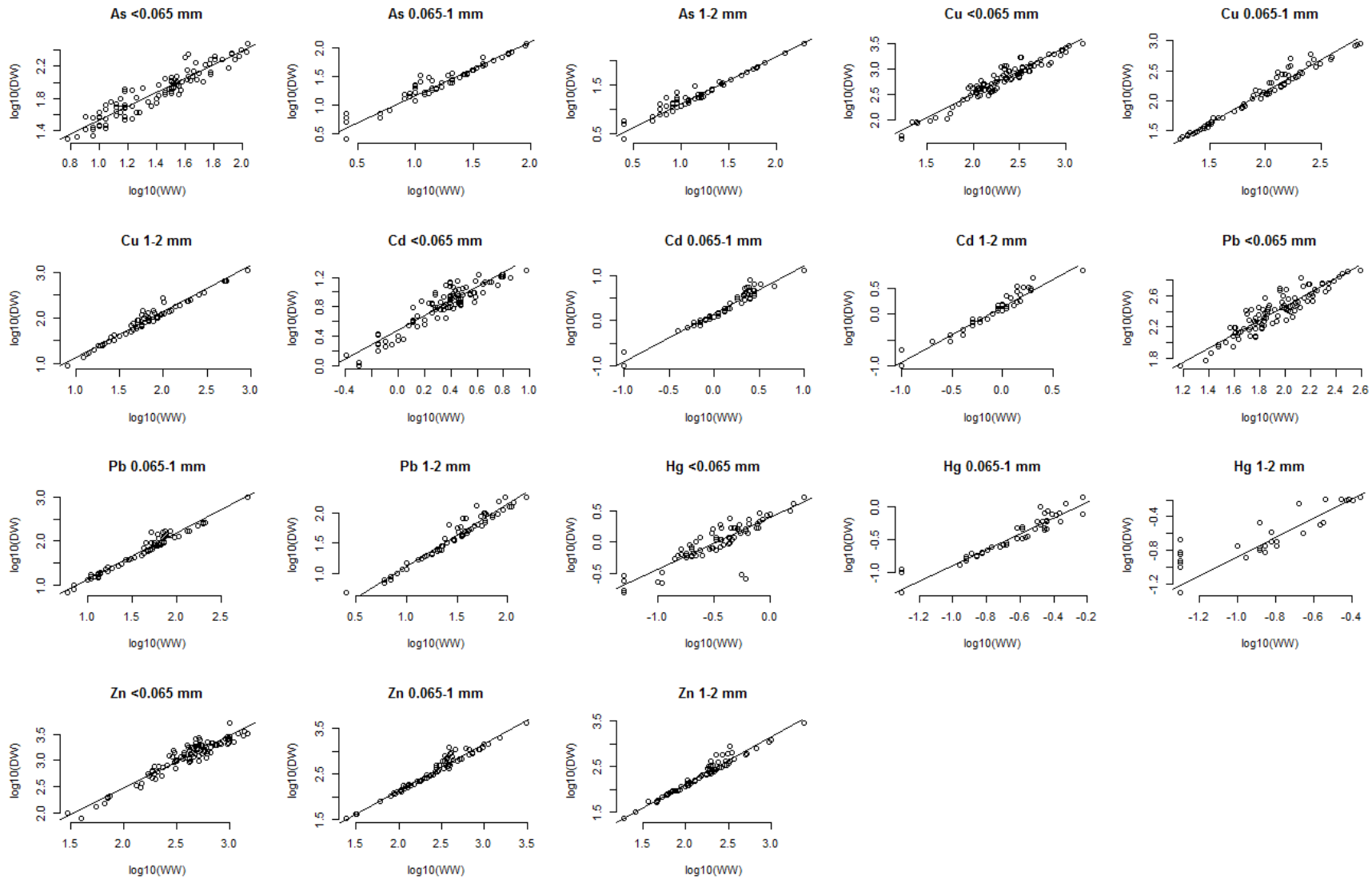

Figure 2-2. Relationship between wet weight (WW) and dry weight (DW) sediment concentrations (log_{10} transformed) of samples collected in the Streamside Tailings Operable Unit and Clark Fork River Operable Unit, 2014.

Table 2-6. Results of simple linear regression of wet weight (WW) on dry weight (DW) sediment metal concentrations (log_{10} transformed) for samples collected in the Streamside Tailings Operable Unit and Clark Fork River Operable Unit, 2014.

Metal	Sieve (Size Fraction)	Slope (log_{10}[WW])*	Intercept	Standard Error (Slope)	*r*-squared
Arsenic	<0.065 mm	0.85109	0.68514	0.03159	0.881
Arsenic	0.065-1 mm	0.94985	0.21874	0.02963	0.936
Arsenic	1-2 mm	0.97094	0.15748	0.02908	0.941
Cadmium	<0.065 mm	0.98060	0.48092	0.04140	0.851
Cadmium	0.065-1 mm	1.06791	0.15820	0.02602	0.960
Cadmium	1-2 mm	1.06829	0.14834	0.02981	0.950
Copper	<0.065 mm	0.92611	0.64478	0.02661	0.925
Copper	0.065-1 mm	1.05006	0.05798	0.02364	0.966
Copper	1-2 mm	1.00154	0.12674	0.02302	0.964
Lead	<0.065 mm	0.89042	0.68540	0.04012	0.834
Lead	0.065-1 mm	1.05619	0.06460	0.02363	0.966
Lead	1-2 mm	1.02890	0.08804	0.02430	0.962
Mercury	<0.065 mm	0.82813	0.39256	0.03355	0.757
Mercury	0.065-1 mm	1.20025	0.30204	0.03106	0.955
Mercury	1-2 mm	1.16283	0.28534	0.05957	0.845
Zinc	<0.065 mm	0.99333	0.49284	0.03249	0.905
Zinc	0.065-1 mm	1.03708	0.06438	0.02554	0.959
Zinc	1-2 mm	1.03744	0.04374	0.02582	0.959

* All *p*-values for slope coefficient estimates were <0.0001.

2.4.3 Contaminants of Concern

2.4.3.1 Arsenic

Dry weight arsenic concentrations in sediment samples, both as weighted mean and fine fraction (<0.065 mm) concentrations, were highest at several specific stations: Silver Bow Creek above Butte Reduction Works, and Silver Bow Creek above and below German Gulch [Table 2-7]. Sediment arsenic concentrations were intermediate in Silver Bow Creek at stations above and below the Butte WWTP, at Rocker, in Reach P near Fairmont, below Stewart Street at Opportunity, and at the newly established site at Frontage Road [Table 2-7]. Lowest sediment arsenic concentrations were observed in Blacktail Creek at Father Sheehan Park, in Silver Bow Creek from above Sand Creek to Miles Crossing, and in German Gulch at its mouth [Table 2-7]. This bimodal spatial pattern of sediment arsenic concentrations, with higher concentrations in the headwaters area and in the lower reaches and lower concentrations in intermediate areas [Figure 2-3], has been observed in each year of monitoring from 2010-2014. Sediment arsenic

concentrations did not display a distinct seasonal pattern [Figure 2-3]. Nine stations had the highest weighted mean concentrations in Q4 and six stations had the highest concentrations in Q1 or Q2.

In 2014, within Subareas 1 and 2, weighted mean dry weight arsenic concentrations exceeded the TEC reference value at all monitoring sites during at least one quarterly monitoring event with one exception - Silver Bow Creek below Browns Gulch [Table 2-7]. Three sites, Silver Bow Creek below the Butte WWTP, at Rocker, and above Sand Creek, also exceeded the PEC reference value during one or more of the quarterly events. In Subareas 3 and 4, weighted mean dry weight arsenic concentrations exceeded the TEC reference value at all six monitoring sites including German Gulch at its mouth, during at least three of four quarterly monitoring events [Table 2-7]. Four of the six sites, including Silver Bow Creek above and below German Gulch, in Reach P near Fairmont, and below Stewart Street at Opportunity, exceeded the higher PEC threshold during at least one of the quarterly events [Table 2-7]. Upstream from the SSTOU, all three monitoring stations exceeded the TEC or the PEC at least once [Table 2-7]. Overall, 50 of 66 samples for dry weight weighted mean arsenic concentrations exceeded the TEC and 20 of 66 samples exceeded the PEC reference value.

Temporal trends for arsenic concentrations at each site and in each size fraction through the monitoring period of record are presented in Figure 2-4 (<0.065 mm), Figure 2-5 (0.065-1 mm), and Figure 2-6 (1-2 mm).

Table 2-7. Total arsenic concentrations (mg/kg dry weight) in quarterly instream sediment samples from Streamside Tailings Operable Unit monitoring stations, 2014. Sample concentrations are the weighted mean among three sediment size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm).

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	10.2	5.9	0.8	3
SS-05A	Silver Bow Creek above Butte Reduction Works	66.8	91.4	97.7	125.5
SS-06G	Silver Bow Creek above Butte WWTP	28.8	27.9	21.2	19.2
SS-07	Silver Bow Creek below Butte WWTP	40.8	19.8	20.6	38.8
SS-08	Silver Bow Creek at Rocker	10.8	28.7	28.6	37
SS-10A	Silver Bow Creek above Sand Creek	21.8	36.2	27.7	27.9
SS-10B	Silver Bow Creek below Sand Creek	5.5	13.9	4.4	16.2
SS-11C	Silver Bow Creek above Browns Gulch	4.1	11.5	2.3	4.3
SS-11D	Silver Bow Creek below Browns Gulch	4.5	6.4	2.4	9
SS-13	Silver Bow Creek in Reach L	6.7	6.6	8.7	16.3
SS-14	Silver Bow Creek at Miles Crossing	9.2	15.1	12.1	16.5
SS-15A	Silver Bow Creek above German Gulch	44.2	71.3	135	83.8
SS-15G	German Gulch at mouth	21.4	32.1	31.3	---
SS-15B	Silver Bow Creek below German Gulch	46.4	48.4	61.2	70.2
SS-16B	Silver Bow Creek in Reach P near Fairmont	38.9	27.4	35.3	45.6
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	18.8	27.1	22.4	45.5
SS-19	Silver Bow Creek at Frontage Road	23.4	17.4	24.6	---

--- Not sampled.

Exceeds the threshold effect concentration [MacDonald et al., 2000].

Exceeds the probable effect concentration [MacDonald et al., 2000].

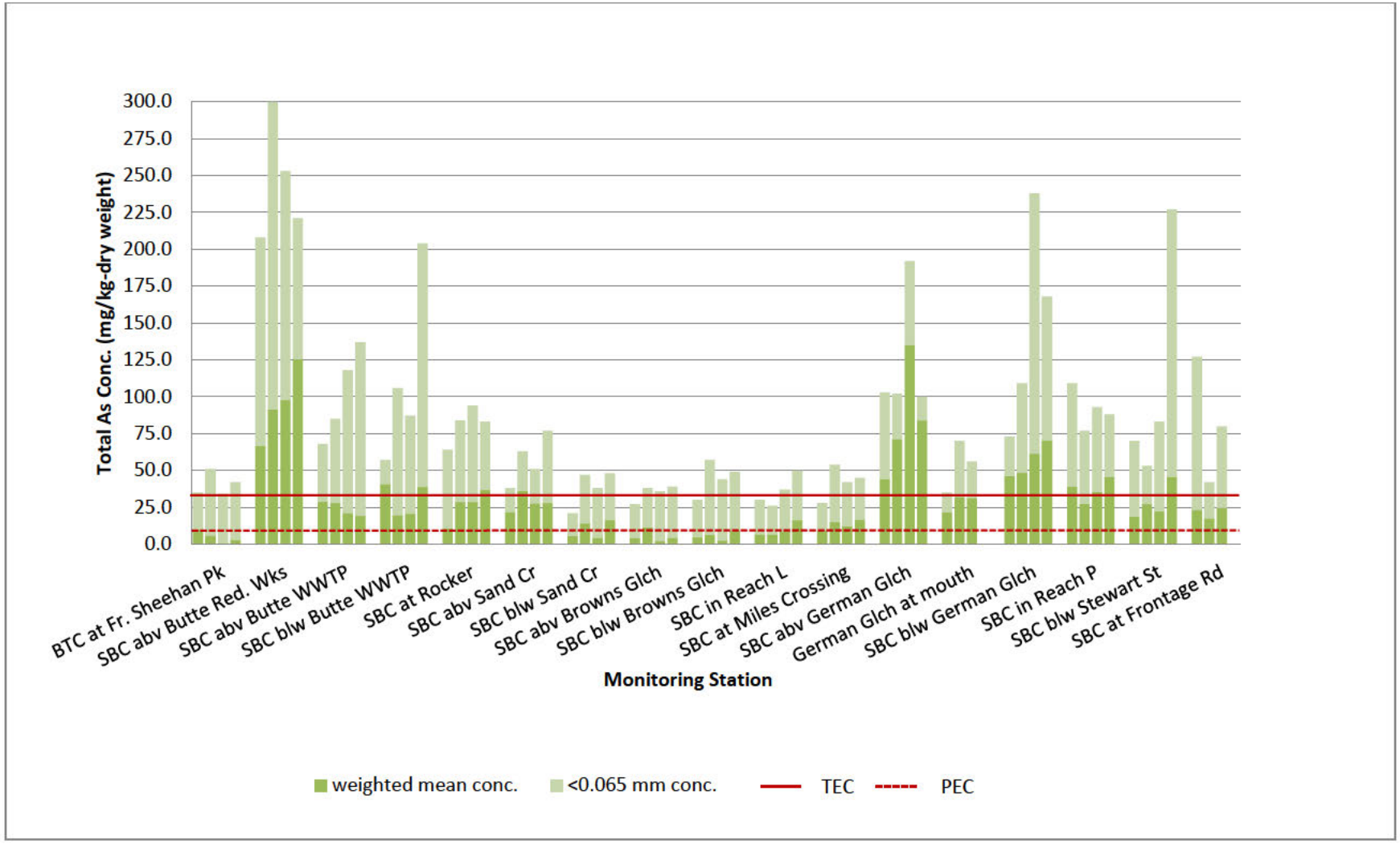

Figure 2-3. Total arsenic concentrations in quarterly instream sediment samples collected at Streamside Tailings Operable Unit monitoring stations, 2014. Solid red line is the "threshold effect concentration" (TEC) and the dashed red line is the "probable effect concentration" (PEC) [MacDonald et al., 2000]. Missing bars indicate that samples were not collected due to channel ice.

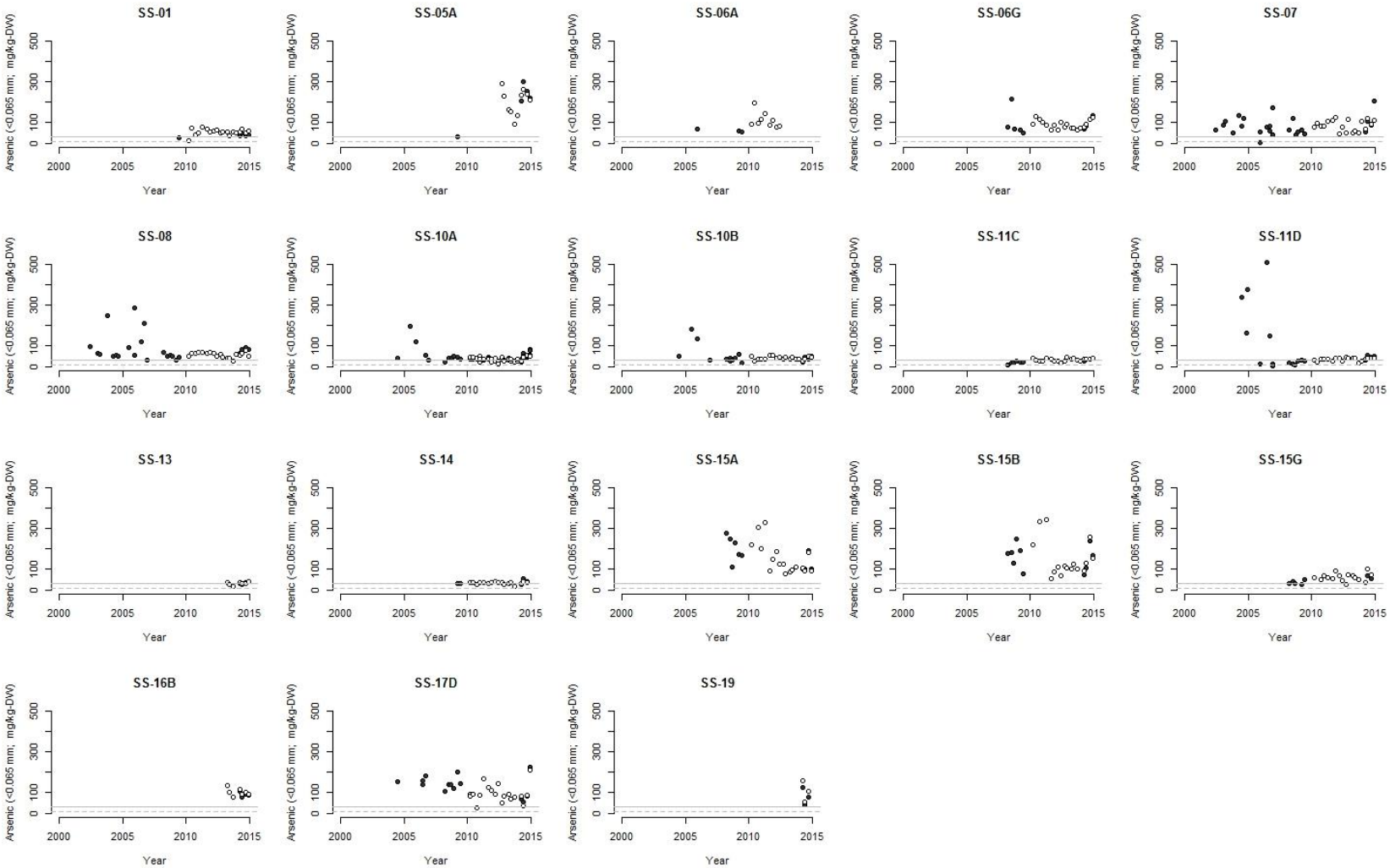

Figure 2-4. Time series plots of fine fraction (<0.065 mm) arsenic concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

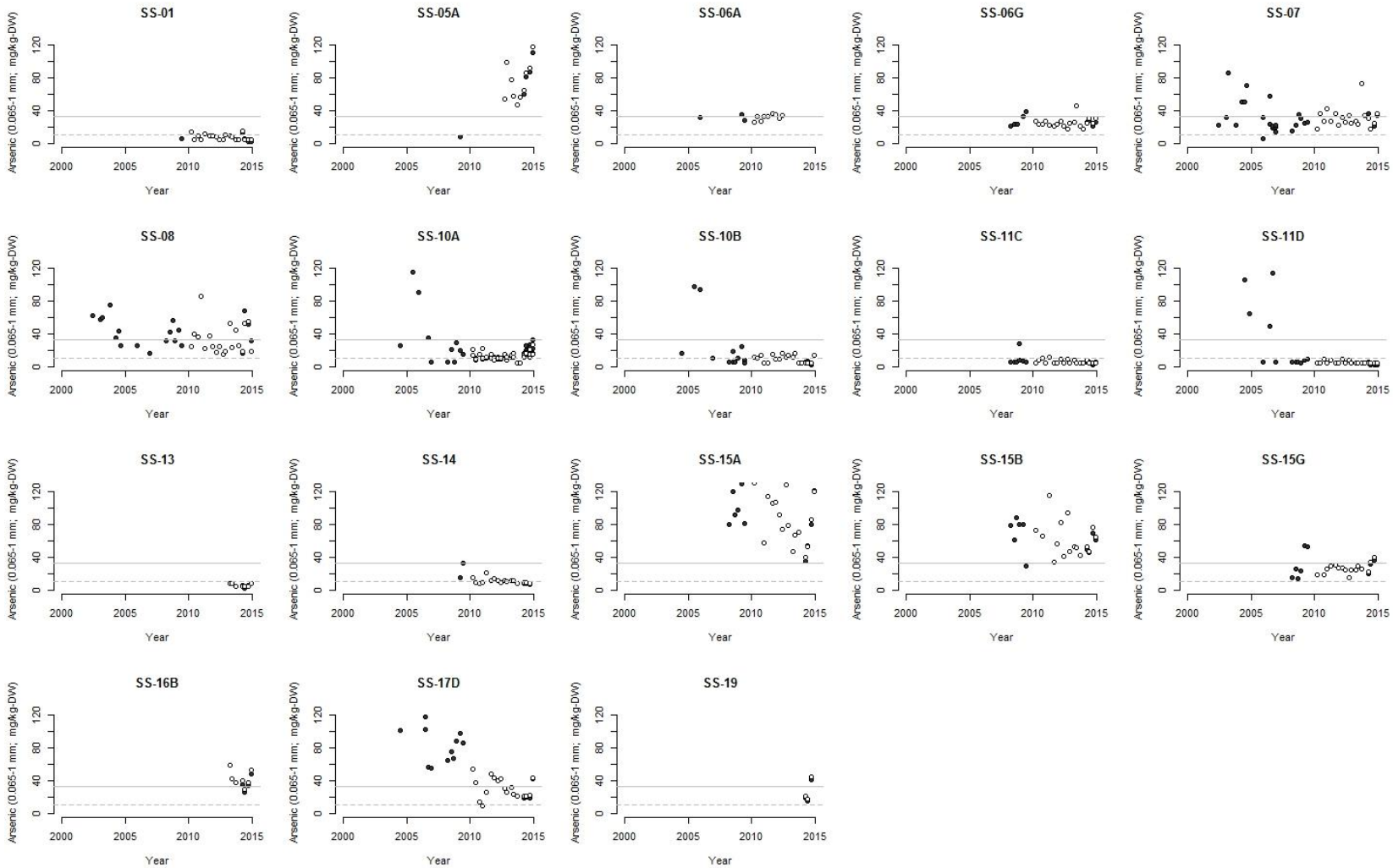

Figure 2-5. Time series plots of mid fraction (0.065-1 mm) arsenic concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

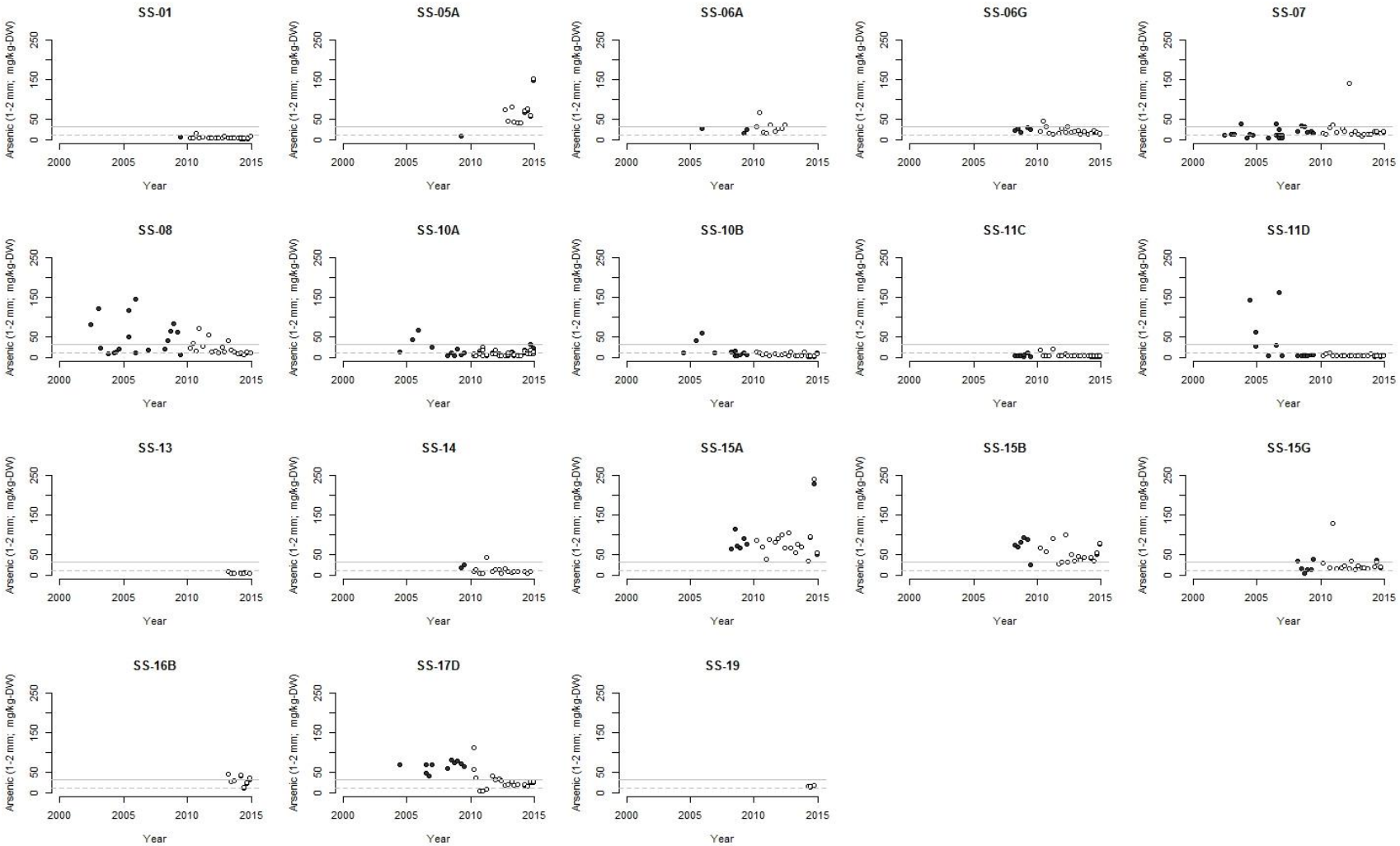

Figure 2-6. Time series plots of coarse fraction (1-2 mm) arsenic concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

2.4.3.2 Cadmium

Dry weight cadmium weighted mean and fine fraction (<0.065 mm) concentrations showed a similar pattern to arsenic although inter-site differences were less distinct for cadmium than for arsenic [Figure 2-3; Figure 2-7]. Cadmium concentrations tended to be higher immediately upstream from or in the upper reaches of Subarea 1, lower in Subarea 2, and somewhat higher in Subareas 3 and 4 [Figure 2-7]. Highest weighted mean cadmium concentrations were noted at the Silver Bow Creek sites above Sand Creek, above German Gulch, and above the Butte Reduction Works [Table 2-8]. Lowest concentrations were in German Gulch at its mouth and Blacktail Creek at Father Sheehan Park [Table 2-8]. This bimodal spatial pattern for cadmium has been commonly observed in all monitoring years from 2010-2014. Cadmium concentrations did not display any distinct seasonal pattern. Six of 17 stations had the highest weighted mean concentrations in Q4 and four to six stations had the highest concentrations in Q1 or Q2 [Table 2-8].

Within SSTOU Subareas 1 and 2, weighted mean dry weight cadmium concentrations exceeded the TEC reference value at all Silver Bow Creek monitoring sites during at least three quarterly monitoring events in 2014 [Table 2-8]. Two sites, Silver Bow Creek at Rocker and above Sand Creek, also exceeded the PEC reference value during at least one of the quarterly events [Table 2-8]. In Subareas 3 and 4, weighted mean dry weight cadmium concentrations exceeded the TEC reference value at all sites except German Gulch at its mouth [Table 2-8]. One of the six sites, Silver Bow Creek above German Gulch, exceeded the PEC reference value during two of the four quarterly events [Table 2-8]. Upstream from the SSTOU, two of the three monitoring stations, Silver Bow Creek above the Butte Reduction Works and above the Butte WWTP exceeded the TEC or the PEC during at least two of the monitoring periods [Table 2-8]. Overall, 52 of 66 samples for dry weight weighted mean cadmium concentrations exceeded the TEC and 7 of 66 samples exceeded the PEC reference value [Table 2-8].

Temporal trends for cadmium concentrations at each site and in each size fraction through the monitoring period of record are presented in Figure 2-8 (<0.065 mm), Figure 2-9 (0.065-1 mm), and Figure 2-10 (1-2 mm).

Table 2-8. Total cadmium concentrations (mg/kg dry weight) in quarterly instream sediment samples from Streamside Tailings Operable Unit monitoring stations, 2014. Sample concentrations are the weighted mean among three sediment size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm).

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.27	0.22	0.17	0.04
SS-05A	Silver Bow Creek above Butte Reduction Works	2.68	3.53	5.96	3.01
SS-06G	Silver Bow Creek above Butte WWTP	2.50	1.45	0.94	0.89
SS-07	Silver Bow Creek below Butte WWTP	3.89	1.10	1.35	2.24
SS-08	Silver Bow Creek at Rocker	1.71	2.17	1.18	6.37
SS-10A	Silver Bow Creek above Sand Creek	4.04	7.07	5.5	5.81
SS-10B	Silver Bow Creek below Sand Creek	1.37	4.48	1.43	4.73
SS-11C	Silver Bow Creek above Browns Gulch	1.25	2.14	1.38	1.35
SS-11D	Silver Bow Creek below Browns Gulch	1.03	1.47	0.92	2.5
SS-13	Silver Bow Creek in Reach L	1.26	1.68	1.52	3.99
SS-14	Silver Bow Creek at Miles Crossing	0.84	1.77	1.63	1.67
SS-15A	Silver Bow Creek above German Gulch	2.57	3.82	5.27	6.8
SS-15G	German Gulch at mouth	0.15	0.03	0.05	---
SS-15B	Silver Bow Creek below German Gulch	2.22	1.45	1.67	1.76
SS-16B	Silver Bow Creek in Reach P near Fairmont	1.23	1.49	1.15	2.95
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.88	2.13	0.95	2.29
SS-19	Silver Bow Creek at Frontage Road	1.93	1.04	0.78	---

--- Not sampled

Exceeds the threshold effect concentration [MacDonald et al., 2000].

Exceeds the probable effect concentration [MacDonald et al., 2000].

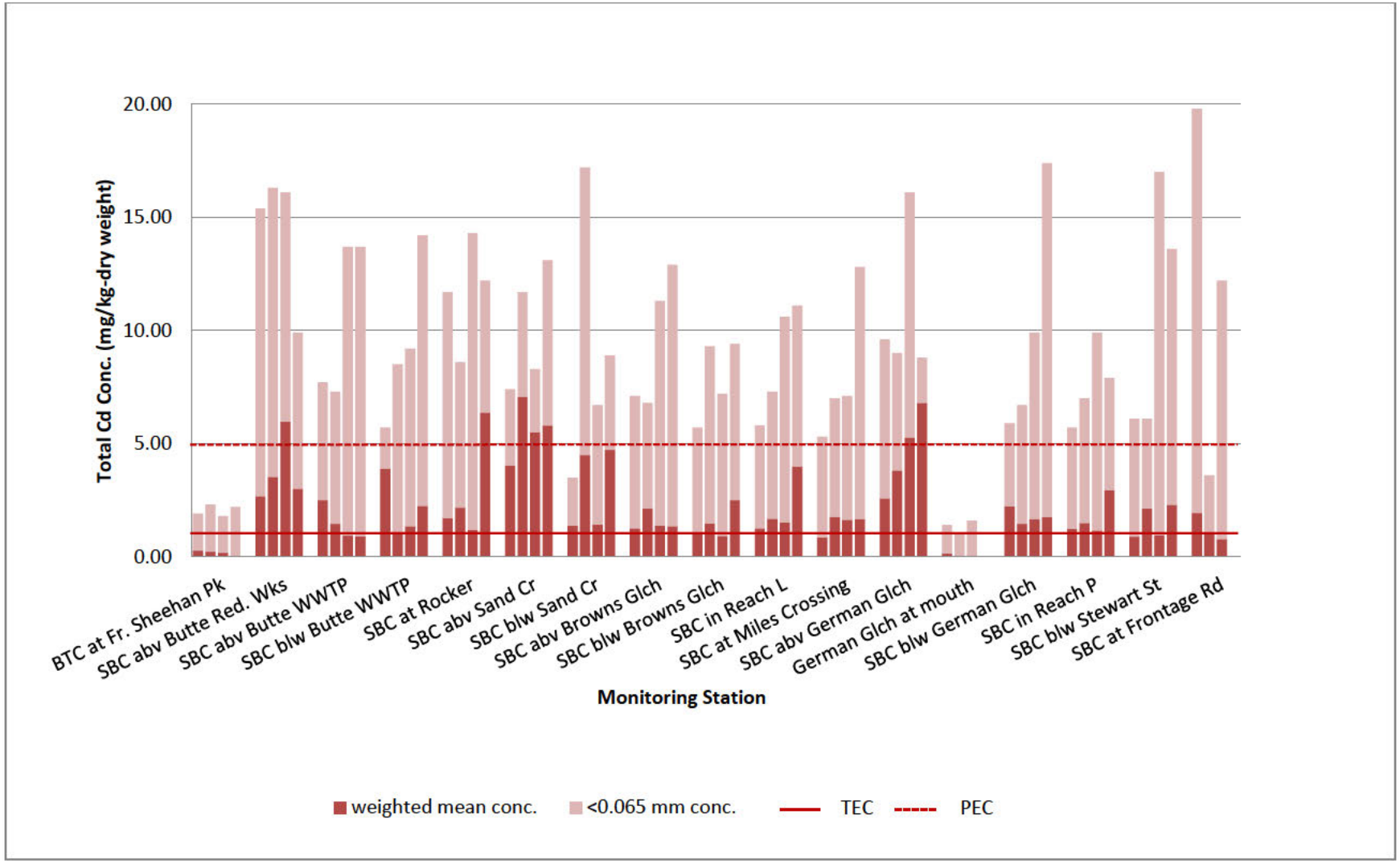

Figure 2-7. Total cadmium concentrations in quarterly instream sediment samples collected at Streamside Tailings Operable Unit monitoring stations, 2014. Solid red line is the "threshold effect concentration" (TEC) and the dashed red line is the "probable effect concentration" (PEC) [MacDonald et al., 2000]. Missing bars indicate that samples were not collected due to channel ice.

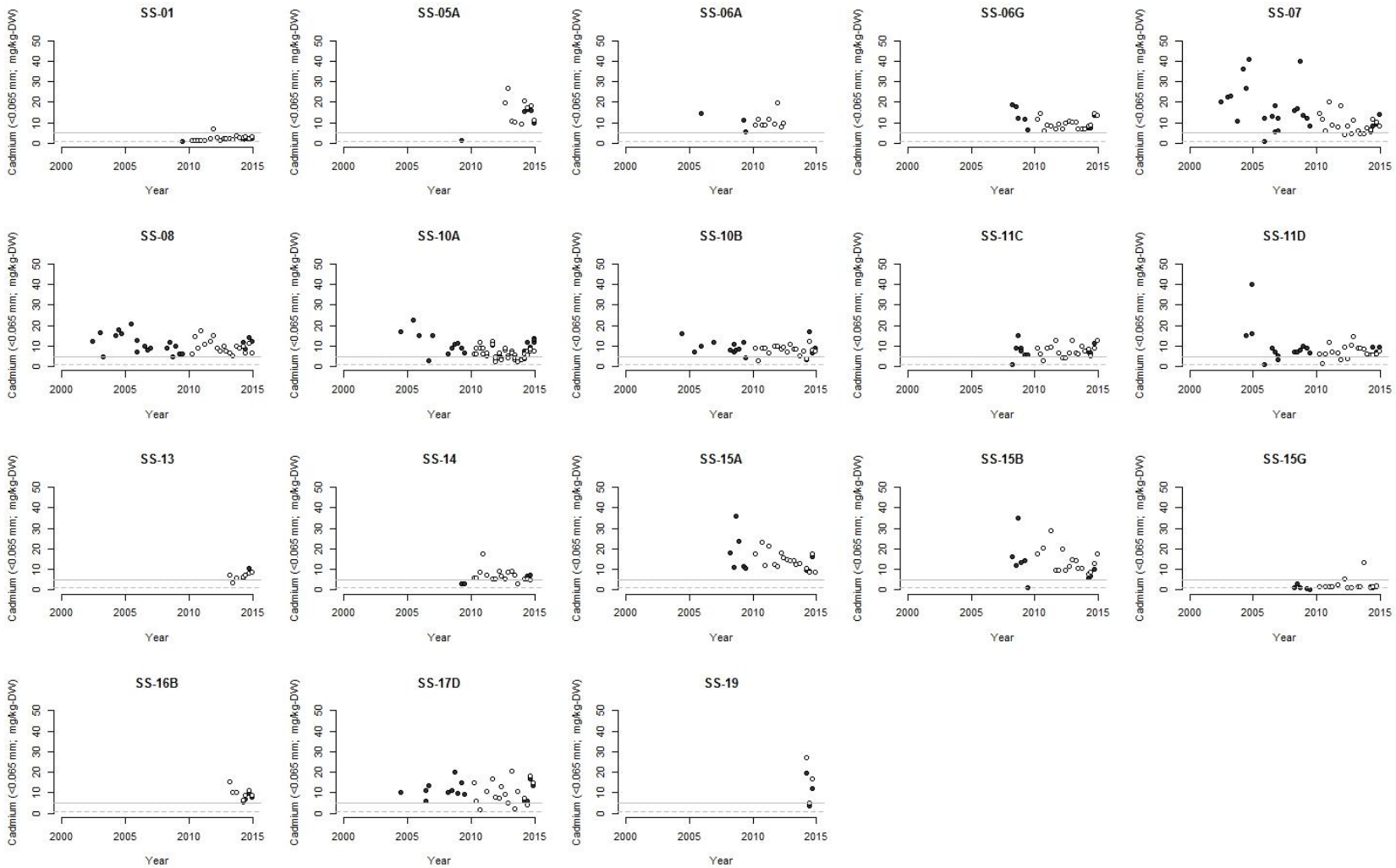

Figure 2-8. Time series plots of fine fraction (<0.065 mm) cadmium concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

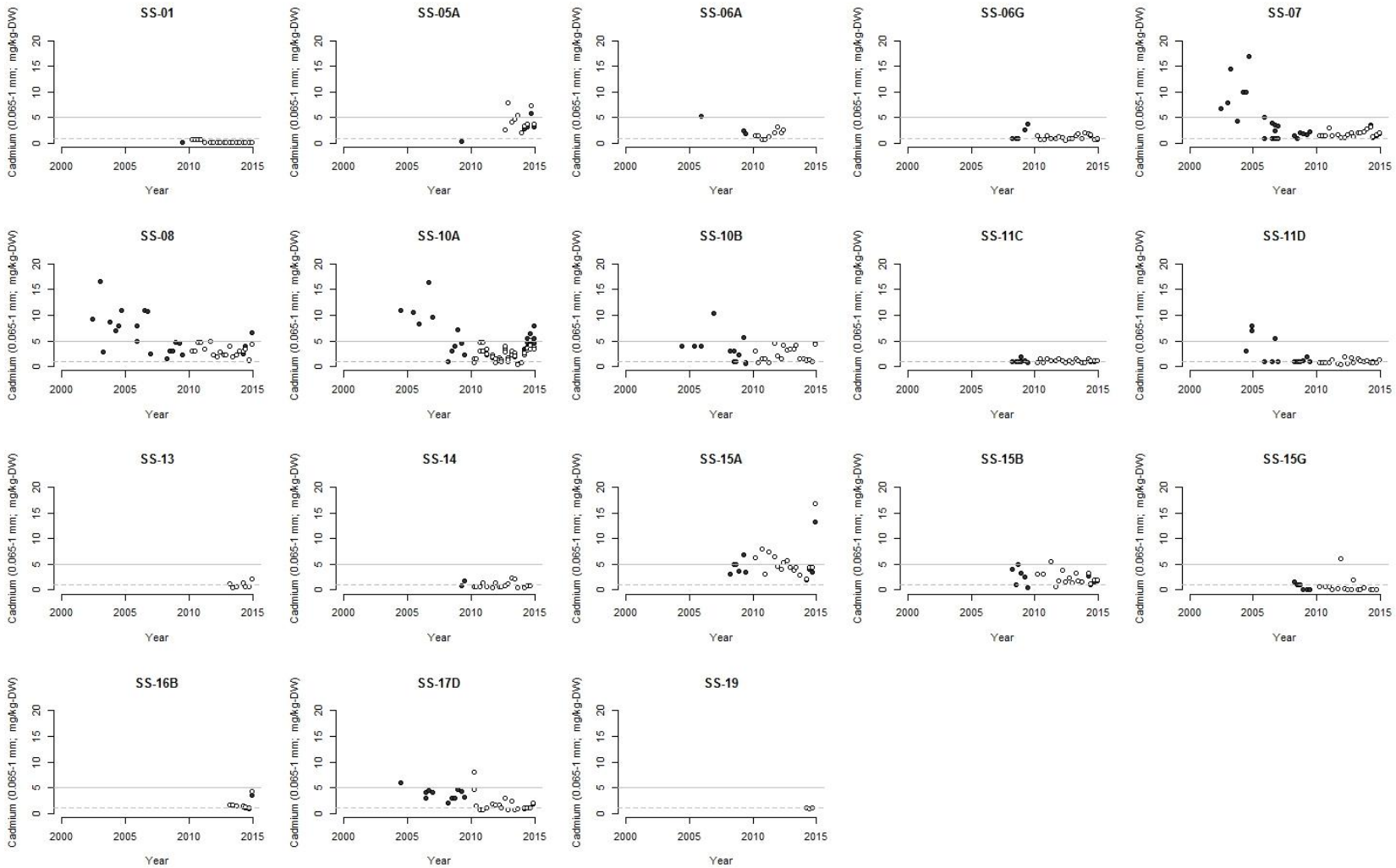

Figure 2-9. Time series plots of mid fraction (0.065-1 mm) cadmium concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

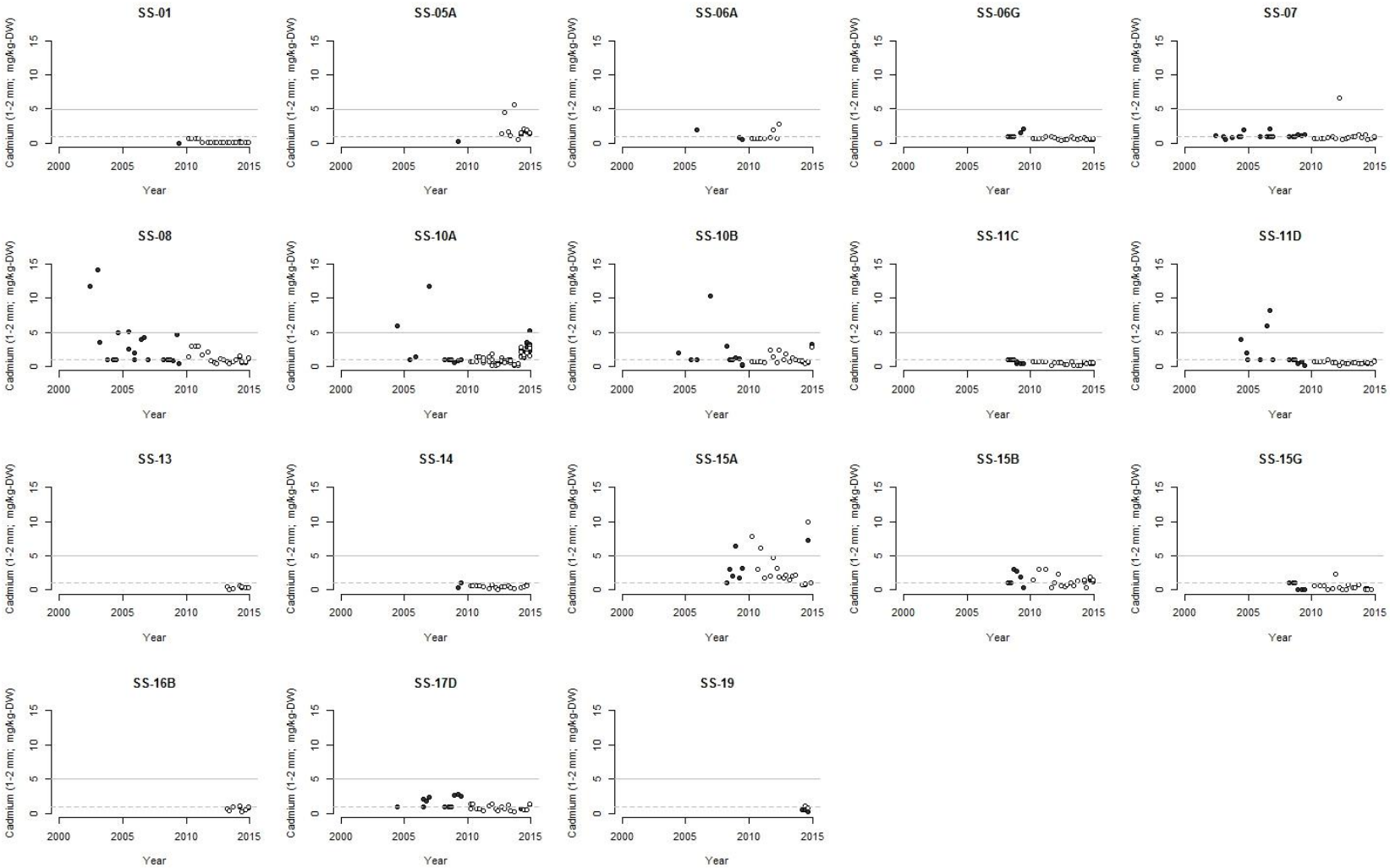

Figure 2-10. Time series plots of coarse fraction (1-2 mm) cadmium concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

2.4.3.3 Copper

The highest dry weight sediment copper concentrations occurred upstream from the SSTOU and in Subarea 3 [Figure 2-11]. The highest weighted mean copper concentrations occurred at Silver Bow Creek above the Butte Reduction Works, and Silver Bow Creek above German Gulch [Figure 2-11]. This bimodal pattern was stronger than for arsenic and cadmium Figure 2-3; Figure 2-7; Figure 2-11]. Lowest copper concentrations were observed in German Gulch at its mouth and in Blacktail Creek at Father Sheehan Park [Table 2-9; Figure 2-11]. This same spatial pattern for sediment copper has been observed regularly during the 2010-2014 period. Sediment copper concentrations did not display any distinct seasonal pattern [Table 2-9]. Eight of 17 stations had the highest weighted mean concentrations in Q4, and five stations had the highest concentrations in Q2 [Table 2-9].

Within Subareas 1 and 2, weighted mean dry weight copper concentrations exceeded the TEC reference value at all monitoring sites during all quarters in 2014 [Table 2-9]. Six of the eight sites also exceeded the PEC reference value during at least one of the quarterly events [Table 2-9]. The Silver Bow Creek above Sand Creek site exceeded the PEC in all quarters [Table 2-9]. In Subareas 3 and 4, weighted mean DW sediment copper concentrations exceeded the TEC at all sites except German Gulch at its mouth during at least three quarters and exceeded the PEC during at least one quarter [Table 2-9]. Upstream from the SSTOU, all three monitoring stations exceeded the TEC, the PEC, or both, during all quarters and site SS-05A exceeded the PEC during all quarters [Table 2-9]. Overall, 63 of 66 samples in 2014 exceeded the TEC and 34 of 66 samples exceeded the PEC [Table 2-9].

Temporal trends for copper concentrations at each site and in each size fraction through the monitoring period of record are presented in Figure 2-12 (<0.065 mm), Figure 2-13 (0.065-1 mm), and Figure 2-14 (1-2 mm).

Table 2-9. Total copper concentrations (mg/kg dry weight) in quarterly instream sediment samples from Streamside Tailings Operable Unit monitoring stations, 2014. Sample concentrations are the weighted mean among three sediment size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm).

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	42.9	40.2	44.2	37.7
SS-05A	Silver Bow Creek above Butte Reduction Works	459.7	919.4	897	907.3
SS-06G	Silver Bow Creek above Butte WWTP	193.5	227.7	84.7	83.1
SS-07	Silver Bow Creek below Butte WWTP	410.7	134.9	176.1	281.4
SS-08	Silver Bow Creek at Rocker	138.5	249.6	235.9	572.2
SS-10A	Silver Bow Creek above Sand Creek	216.5	460.4	343.6	418.2
SS-10B	Silver Bow Creek below Sand Creek	56.2	161	72.4	281.1
SS-11C	Silver Bow Creek above Browns Gulch	65.4	120.3	49.4	391.2
SS-11D	Silver Bow Creek below Browns Gulch	49.4	62.4	42.7	146.5
SS-13	Silver Bow Creek in Reach L	54.8	50.6	78.2	232.1
SS-14	Silver Bow Creek at Miles Crossing	51.2	128	97.6	97.5
SS-15A	Silver Bow Creek above German Gulch	349.7	406.3	676	427.6
SS-15G	German Gulch at mouth	28.2	30.2	26.3	---
SS-15B	Silver Bow Creek below German Gulch	208.1	184.4	162.8	266.2
SS-16B	Silver Bow Creek in Reach P near Fairmont	144.8	158.9	158.5	193.3
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	88.1	198.6	89.1	315.6
SS-19	Silver Bow Creek at Frontage Road	300	93.8	80.7	---

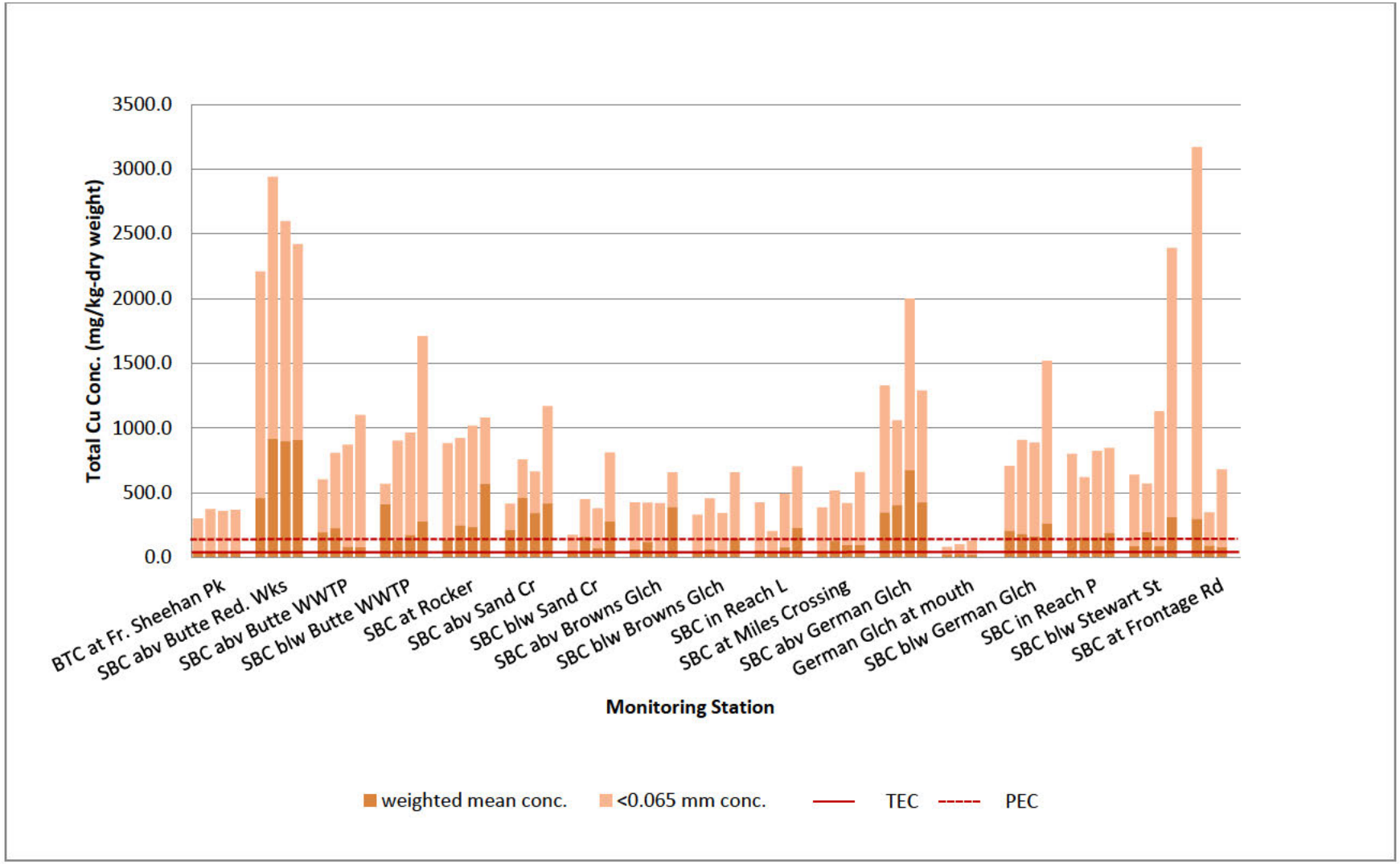

Figure 2-11. Total copper concentrations in quarterly instream sediment samples collected at Streamside Tailings Operable Unit monitoring stations, 2014. Solid red line is the "threshold effect concentration" (TEC) and the dashed red line is the "probable effect concentration" (PEC) [MacDonald et al., 2000]. Missing bars indicate that samples were not collected due to channel ice.

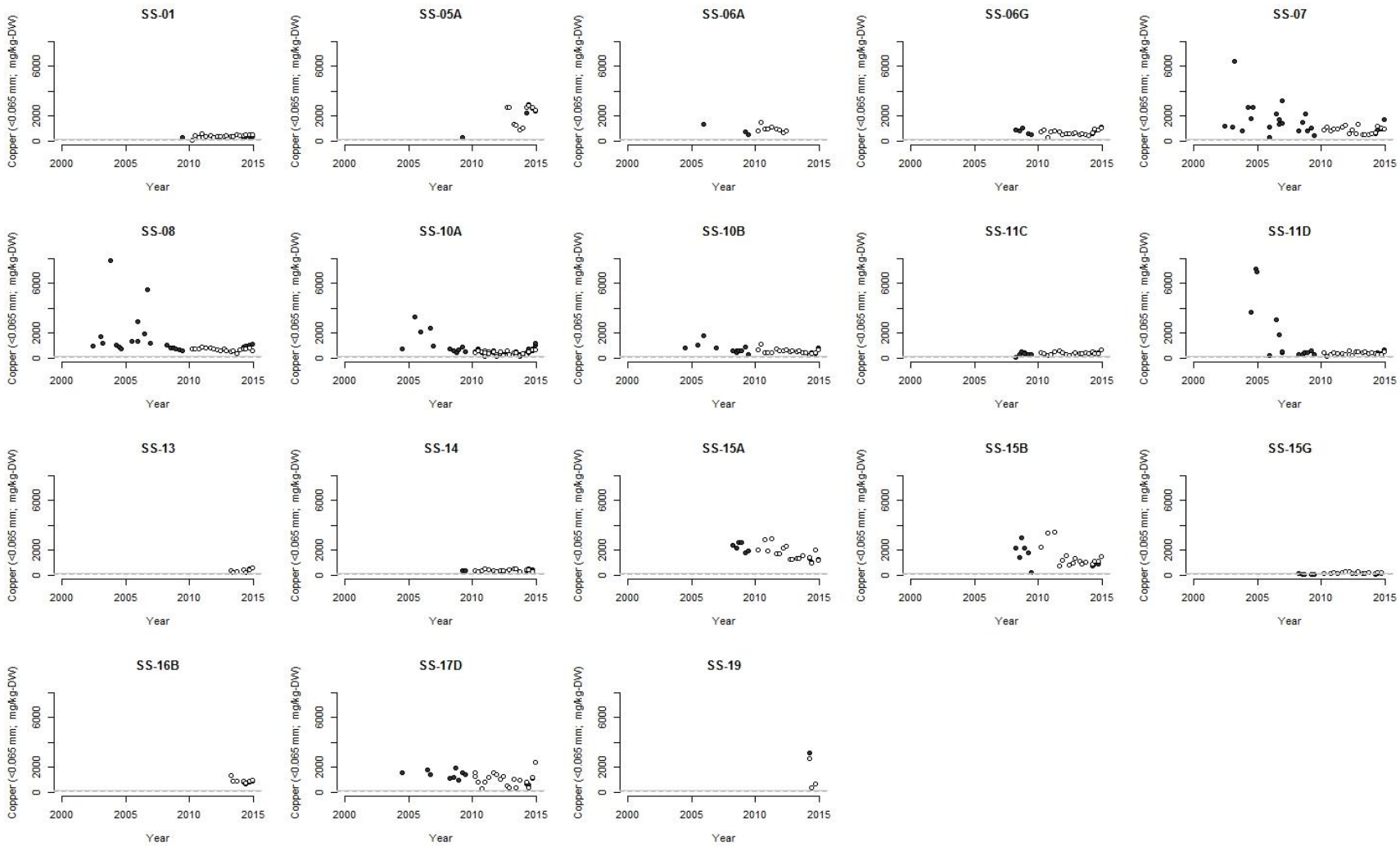

Figure 2-12. Time series plots of fine fraction (<0.065 mm) copper concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

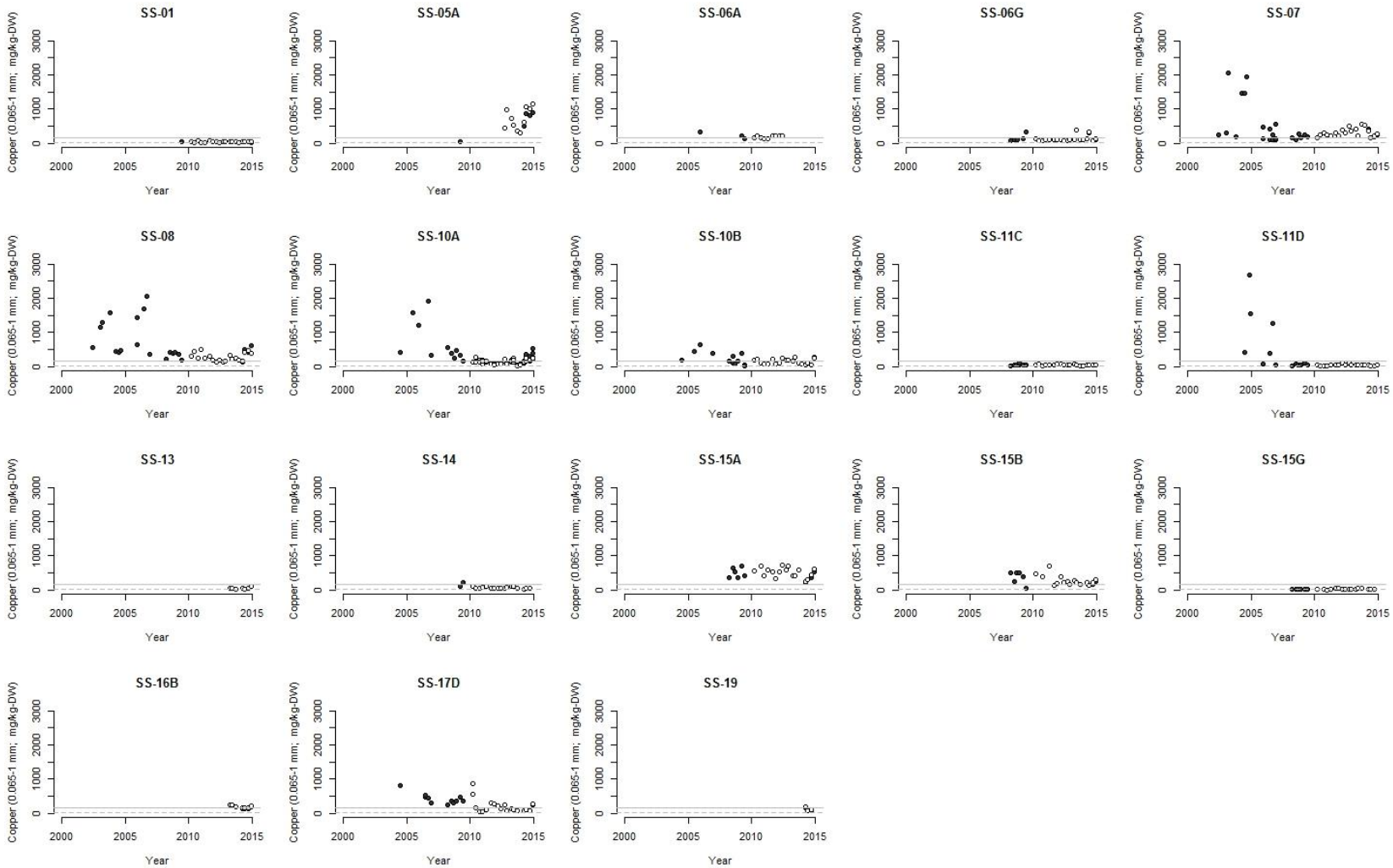

Figure 2-13. Time series plots of mid fraction (0.065-1 mm) copper concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

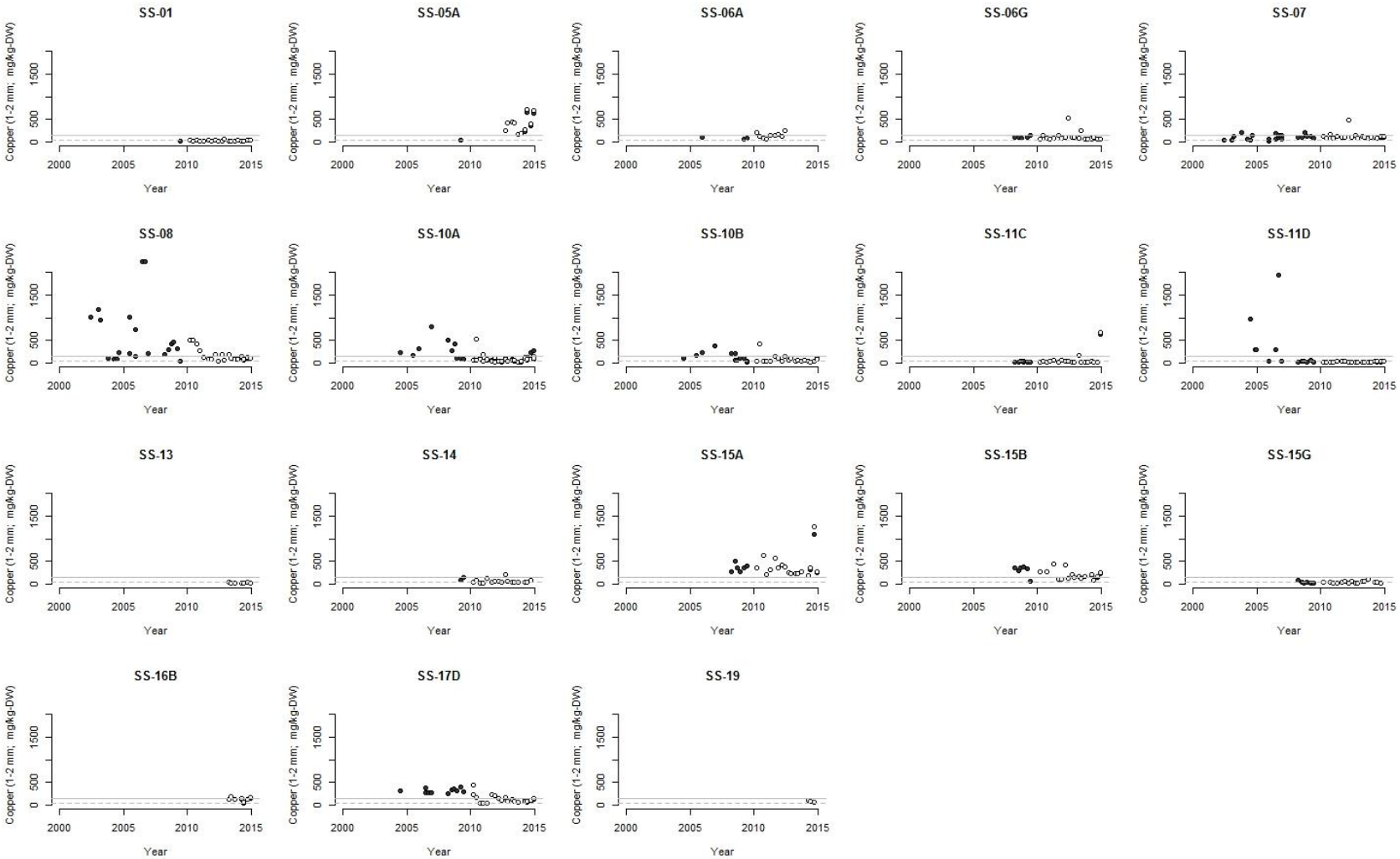

Figure 2-14. Time series plots of coarse fraction (1-2 mm) copper concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

2.4.3.4 Lead

Sediment lead concentrations showed a bimodal spatial pattern that was similar to that observed for arsenic and copper [Figure 2-3; Figure 2-11; Figure 2-15]. Lead concentrations were most elevated immediately upstream from the SSTOU, within Subarea 1, and in Subarea 3 [Figure 2-15]. Concentrations were lower in Subareas 2 and 4, and consistently low in German Gulch at its mouth and Blacktail Creek at Father Sheehan Park [Figure 2-15]. Highest weighted mean lead concentrations were noted at the Silver Bow Creek sites above the Butte Reduction Works, above Sand Creek, and above German Gulch [Table 2-10]. Lowest concentrations were in German Gulch at its mouth and Blacktail Creek at Father Sheehan Park [Table 2-10]. This spatial pattern for sediment lead concentrations has been commonly observed in all monitoring years from 2010-2014. Sediment lead concentrations did not display any particularly distinct seasonal pattern [Figure 2-15]. Six of 17 stations had the highest weighted mean concentrations in Q4 and four stations had the highest concentrations in either Q1 or Q3 [Table 2-10].

Within SSTOU Subareas 1 and 2 (sites SS-07, SS-08, SS-10A, and SS-10B), weighted mean dry weight lead concentrations exceeded the TEC at all sites during at least one monitoring event in 2014 [Table 2-10]. Three Subarea 1 and 2 sites (SS-07, SS-08, and SS-10B) also exceeded the PEC during at least one quarter [Table 2-10]. In Subareas 3 and 4, weighted mean dry weight sediment lead concentrations exceeded the TEC at all sites except in German Gulch (SS-15G) during at least two quarters [Table 2-10]. No Subarea 4 sites had weighted mean dry weight lead concentrations exceeding the PEC in 2014 [Table 2-10]. Upstream from the SSTOU, two of the three monitoring sites (SS-05A, and SS-06G) exceeded the TEC or the PEC during each quarter [Table 2-10]. Overall, 46 of 66 samples for dry weight weighted mean lead concentrations exceeded the TEC and 14 of 66 samples exceeded the PEC in 2014 [Table 2-10].

Temporal trends for lead concentrations at each site and in each size fraction through the monitoring period of record are presented in Figure 2-16 (<0.065 mm), Figure 2-17 (0.065-1 mm), and Figure 2-18 (1-2 mm).

Table 2-10. Total lead concentrations (mg/kg dry weight) in quarterly instream sediment samples from Streamside Tailings Operable Unit monitoring stations, 2014. Sample concentrations are the weighted mean among three sediment size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm).

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	18.1	20.6	20.9	13.9
SS-05A	Silver Bow Creek above Butte Reduction Works	161.5	239.8	251.4	179.4
SS-06G	Silver Bow Creek above Butte WWTP	104.1	70.7	67.7	67.4
SS-07	Silver Bow Creek below Butte WWTP	146.7	70.6	71.5	100.1
SS-08	Silver Bow Creek at Rocker	62.7	94.8	56.5	204.4
SS-10A	Silver Bow Creek above Sand Creek	147.9	185.5	167	206.2
SS-10B	Silver Bow Creek below Sand Creek	28.4	101.1	34.2	88.7
SS-11C	Silver Bow Creek above Browns Gulch	22.6	45.3	24.6	32
SS-11D	Silver Bow Creek below Browns Gulch	19.7	36.9	26.8	44.5
SS-13	Silver Bow Creek in Reach L	21.2	25.9	26.9	61.6
SS-14	Silver Bow Creek at Miles Crossing	21.5	68.8	75.2	134.4
SS-15A	Silver Bow Creek above German Gulch	115.9	139.3	229.4	165.4
SS-15G	German Gulch at mouth	13	10	9.4	---
SS-15B	Silver Bow Creek below German Gulch	82.3	92.2	56	81.9
SS-16B	Silver Bow Creek in Reach P near Fairmont	69.7	76.7	90.8	63.2
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	29.5	82.1	28.6	115.6
SS-19	Silver Bow Creek at Frontage Road	58.3	45.1	52.8	---

--- Not sampled

Exceeds the threshold effect concentration [MacDonald et al., 2000].

Exceeds the probable effect concentration [MacDonald et al., 2000].

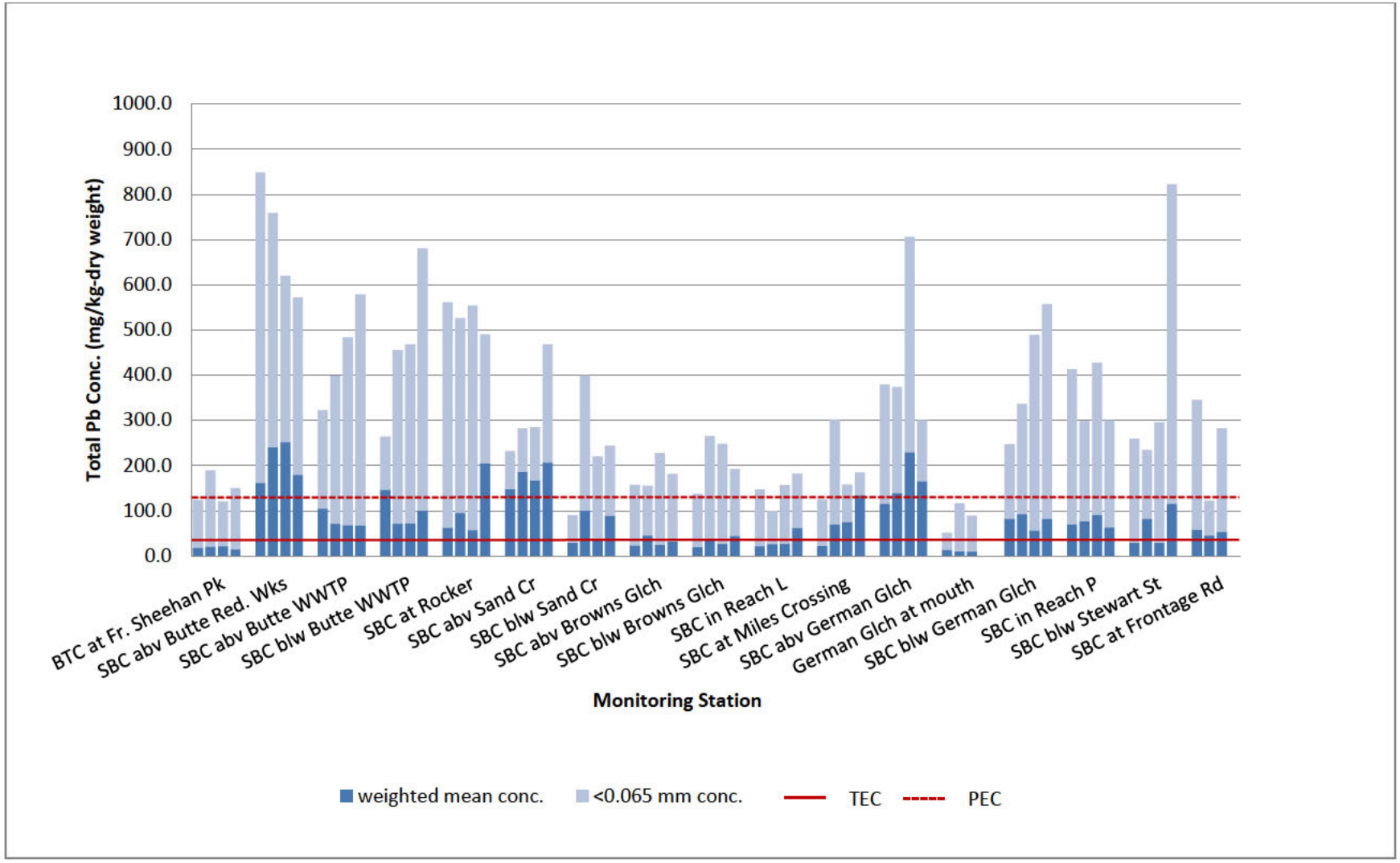

Figure 2-15. Total lead concentrations in quarterly instream sediment samples collected at Streamside Tailings Operable Unit monitoring stations, 2014. Solid red line is the "threshold effect concentration" (TEC) and the dashed red line is the "probable effect concentration" (PEC) [MacDonald et al., 2000]. Missing bars indicate that samples were not collected due to channel ice.

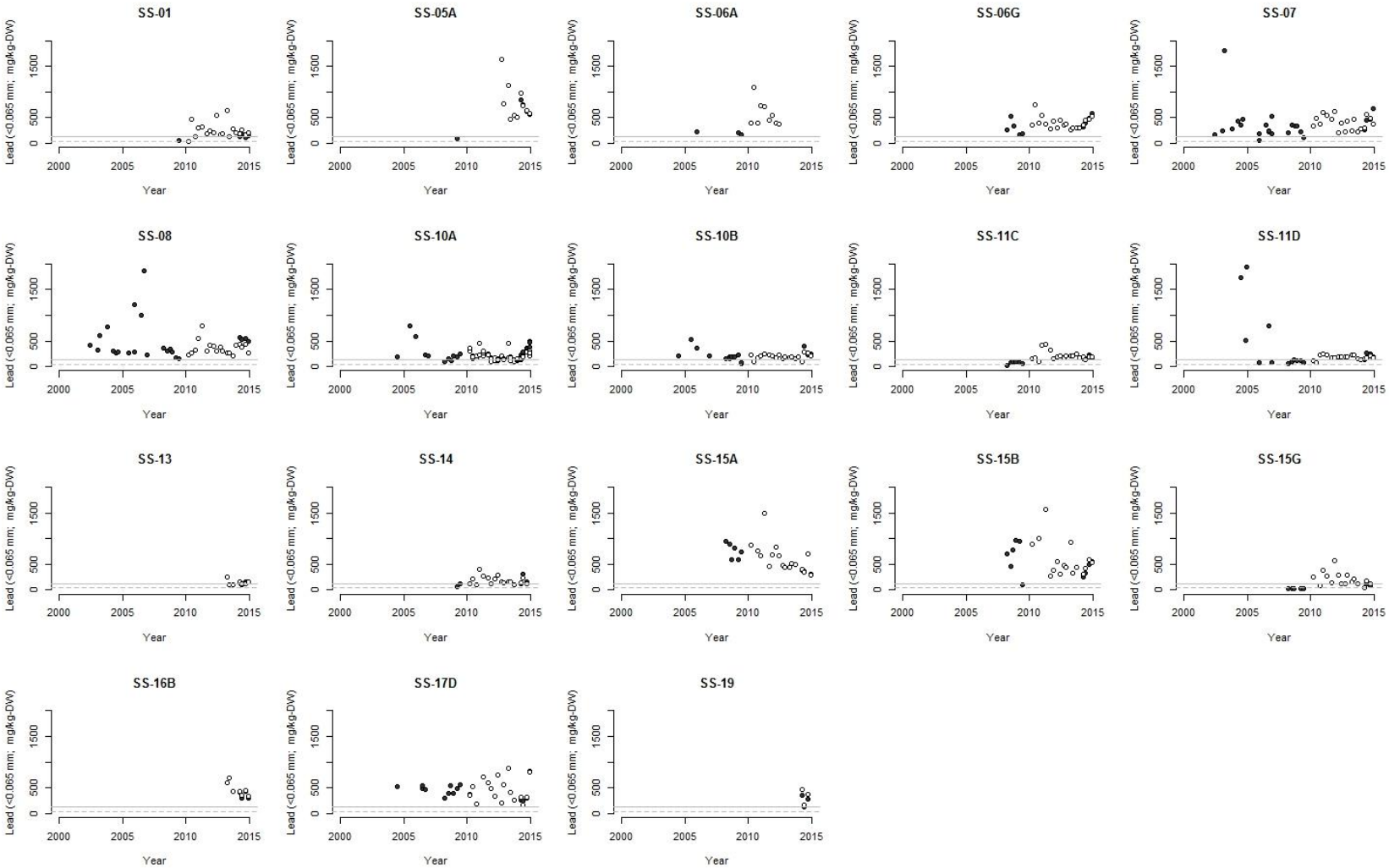

Figure 2-16. Time series plots of fine fraction (<0.065 mm) lead concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

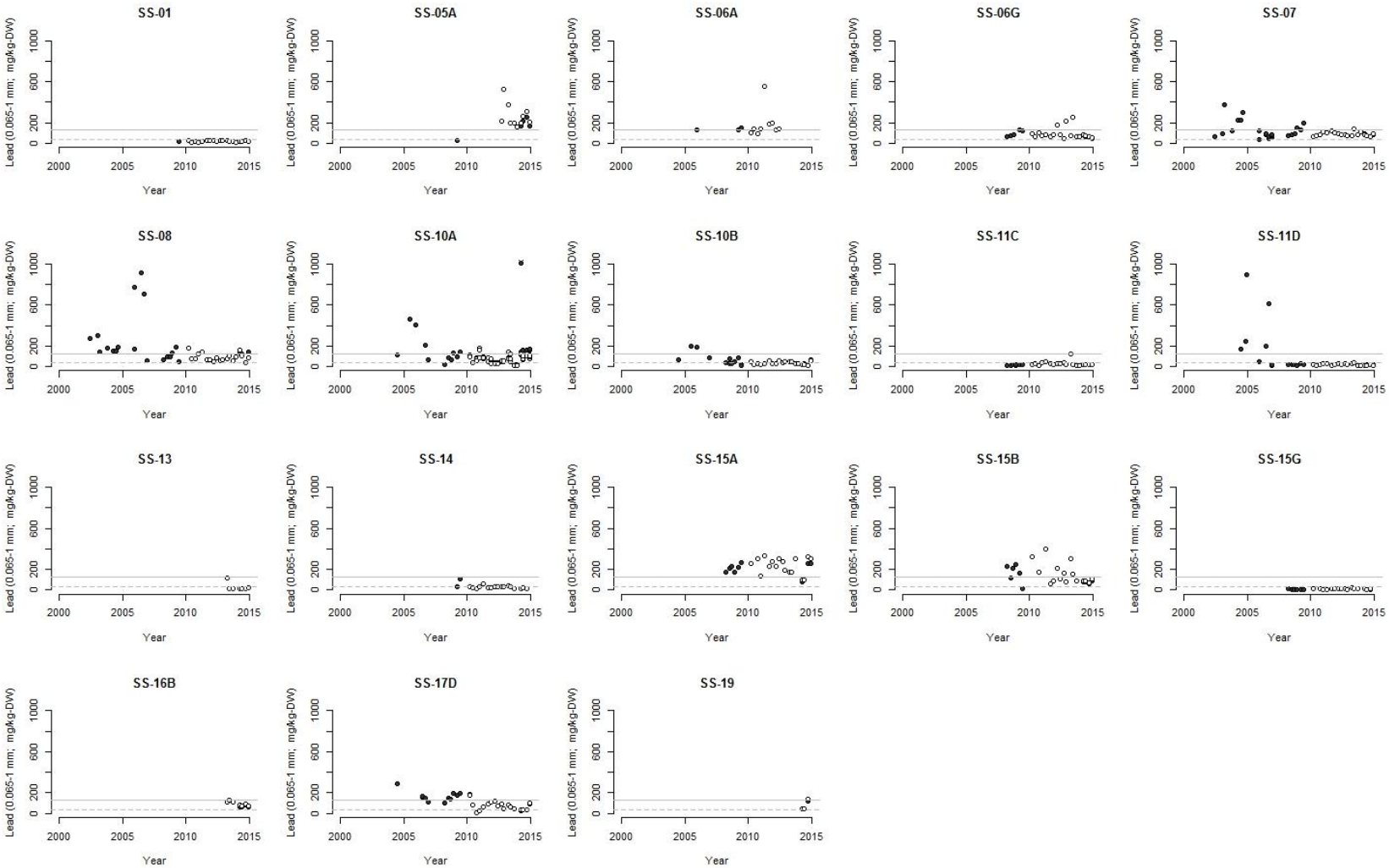

Figure 2-17. Time series plots of mid fraction (0.065-1 mm) lead concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

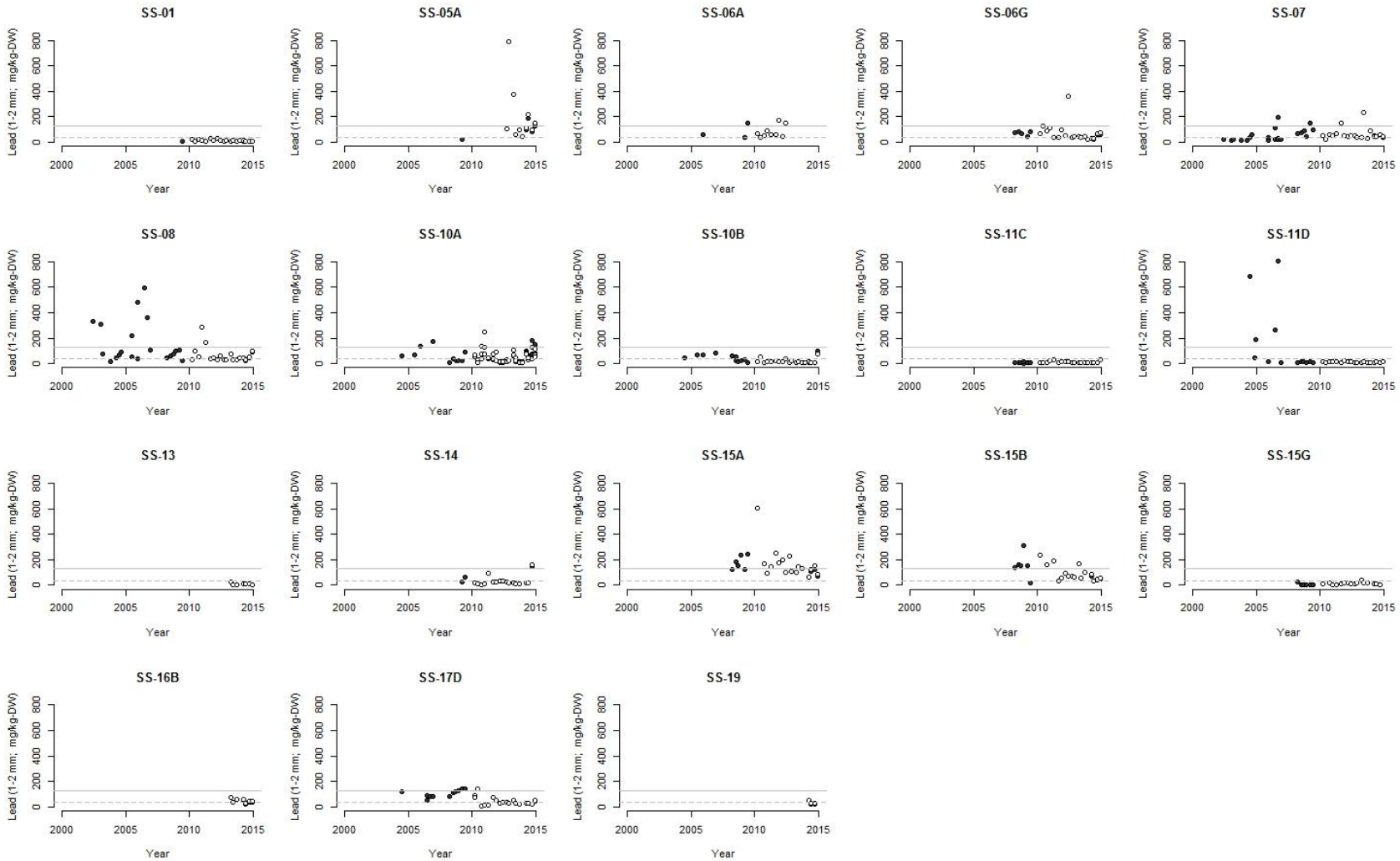

Figure 2-18. Time series plots of coarse fraction (1-2 mm) lead concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

2.4.3.5 Mercury

Weighted mean and fine fraction (<0.065 mm) mercury concentrations (dry weight) tended to be higher in the upper reaches of Subarea 1 (Silver Bow Creek at Rocker site), in Subarea 3 (Silver Bow Creek above German Gulch site), and in Subarea 4 (Silver Bow Creek at Frontage Road site), and lower in Subarea 2 sites (Silver Bow Creek above and below Browns Gulch, in Reach L, and at Miles Crossing sites) [Figure 2-19]. Among individual monitoring stations, highest weighted mean mercury concentrations were noted at the Silver Bow Creek sites above Sand Creek, above German Gulch, and at Rocker [Table 2-11]. Lowest concentrations were measured in Blacktail Creek at Father Sheehan Park and in German Gulch at its mouth [Table 2-11]. This bimodal spatial pattern for sediment mercury concentrations [Figure 2-19] has, like for arsenic [Figure 2-3], been commonly observed in all monitoring years from 2010-2014. Sediment mercury concentrations did not display any distinct seasonal pattern [Figure 2-19]. Seven of the 17 stations had the highest weighted mean concentrations in Q4, and four stations had the highest concentrations in Q3 [Table 2-11].

Within SSTOU Subareas 1 and 2, weighted mean dry weight mercury concentrations exceeded the TEC at seven of the eight Silver Bow Creek monitoring sites (SS-07, SS-08, SS-10A, SS-10B, SS-11D, SS-13, SS-14) during at least one of the quarterly monitoring events in 2014 [Table 2-11]. Two sites, Silver Bow Creek at Rocker and above Sand Creek, also exceeded the PEC during one (Q4) of the quarterly events [Table 2-11]. In Subareas 3 and 4, weighted mean dry weight mercury concentrations exceeded the TEC at five of the six monitoring sites (SS-15A, SS-15B, SS-16B, SS-17D, and SS-19; Table 2-11). None of the six sites in Subareas 3 and 4 exceeded the PEC threshold (SS-15A, SS-15G, SS-15B, SS-16B, SS-17D, and SS-19; Table 2-11). Upstream from the SSTOU, two of the three monitoring stations (SS-05A and SS-06G), exceeded the TEC during two quarterly monitoring events. Overall, 33 of 66 SSTOU samples for dry weight weighted mean mercury concentrations exceeded the TEC and just 2 of 66 site measurements exceeded the PEC [Table 2-11].

Temporal trends for mercury concentrations at each site and in each size fraction through the monitoring period of record are presented in Figure 2-20 (<0.065 mm), Figure 2-21 (0.065-1 mm), and Figure 2-22 (1-2 mm).

Table 2-11. Total mercury concentrations (mg/kg dry weight) in quarterly instream sediment samples from Streamside Tailings Operable Unit monitoring stations, 2014. Sample concentrations are the weighted mean among three sediment size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm).

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	0.01	0.01	ND	ND
SS-05A	Silver Bow Creek above Butte Reduction Works	0.09	0.20	0.28	0.18
SS-06G	Silver Bow Creek above Butte WWTP	0.22	0.19	0.03	0.06
SS-07	Silver Bow Creek below Butte WWTP	0.56	0.16	0.13	0.25
SS-08	Silver Bow Creek at Rocker	0.20	0.51	0.26	1.12
SS-10A	Silver Bow Creek above Sand Creek	0.70	0.91	0.88	1.18
SS-10B	Silver Bow Creek below Sand Creek	0.05	0.13	0.14	0.63
SS-11C	Silver Bow Creek above Browns Gulch	0.03	0.13	0.08	0.05
SS-11D	Silver Bow Creek below Browns Gulch	0.04	0.06	0.03	0.19
SS-13	Silver Bow Creek in Reach L	0.03	0.05	0.07	0.35
SS-14	Silver Bow Creek at Miles Crossing	0.04	0.11	0.12	0.56
SS-15A	Silver Bow Creek above German Gulch	0.68	0.54	0.73	0.44
SS-15G	German Gulch at mouth	0.02	0.01	0.02	---
SS-15B	Silver Bow Creek below German Gulch	0.31	0.31	0.36	0.29
SS-16B	Silver Bow Creek in Reach P near Fairmont	0.20	0.31	0.40	0.29
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	0.09	0.36	0.07	0.63
SS-19	Silver Bow Creek at Frontage Road	0.40	0.22	0.04	---

--- Not sampled

Exceeds the threshold effect concentration [MacDonald et al., 2000].

Exceeds the probable effect concentration [MacDonald et al., 2000].

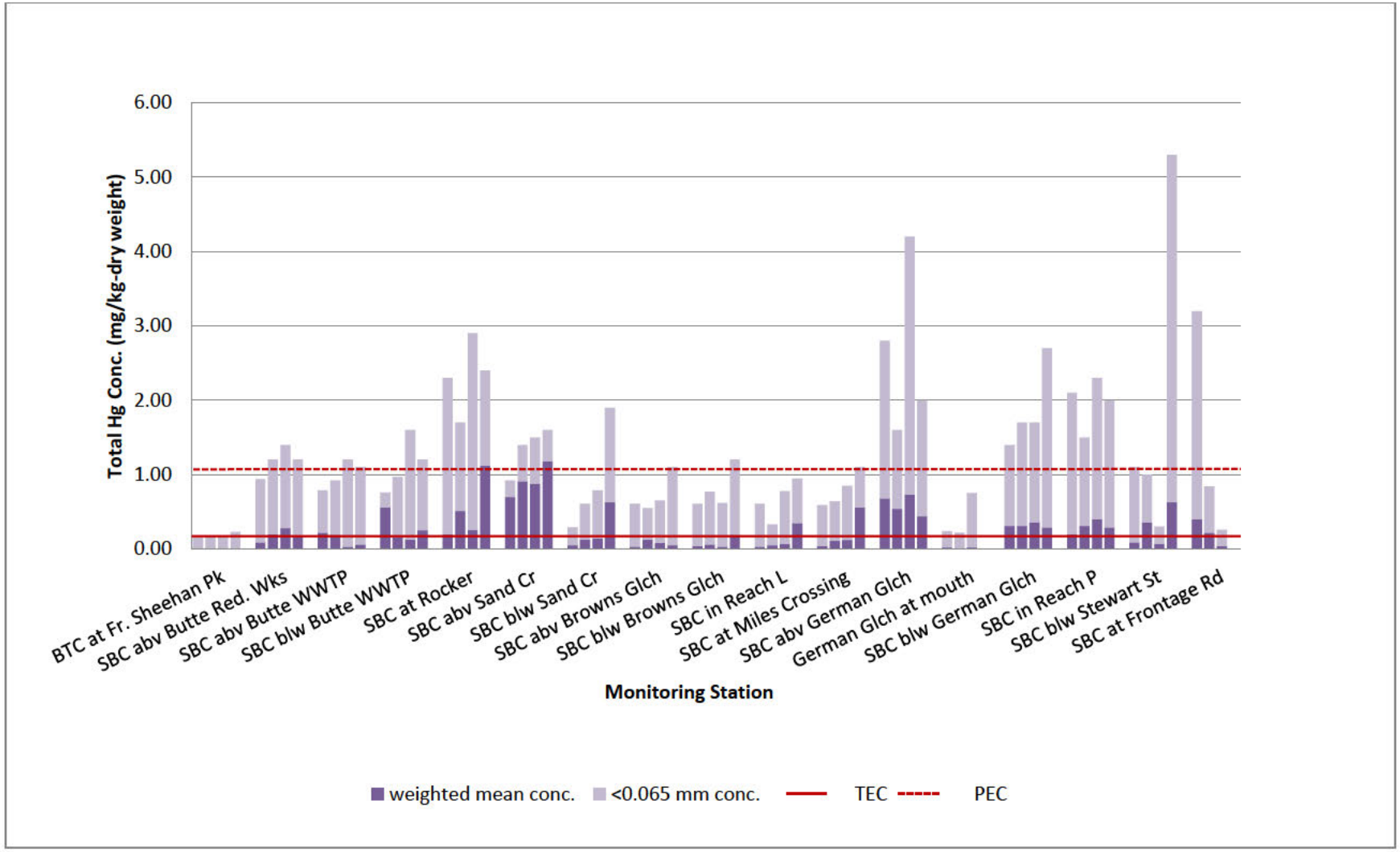

Figure 2-19. Total mercury concentrations in quarterly instream sediment samples collected at Streamside Tailings Operable Unit monitoring stations, 2014. Solid red line is the "threshold effect concentration" (TEC) and the dashed red line is the "probable effect concentration" (PEC) [MacDonald et al., 2000]. Missing bars indicate that samples were not collected due to channel ice.

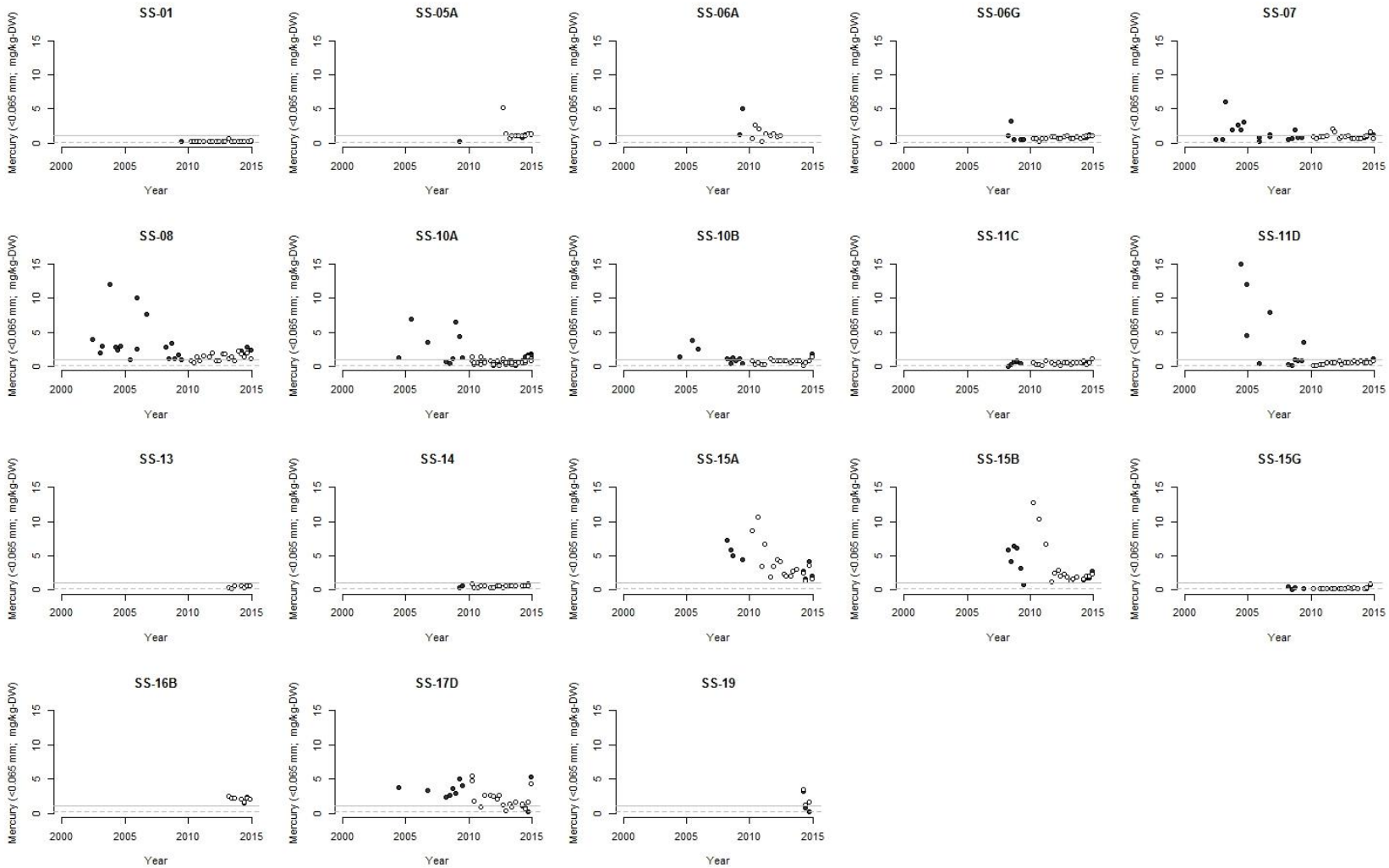

Figure 2-20. Time series plots of fine fraction (<0.065 mm) mercury concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

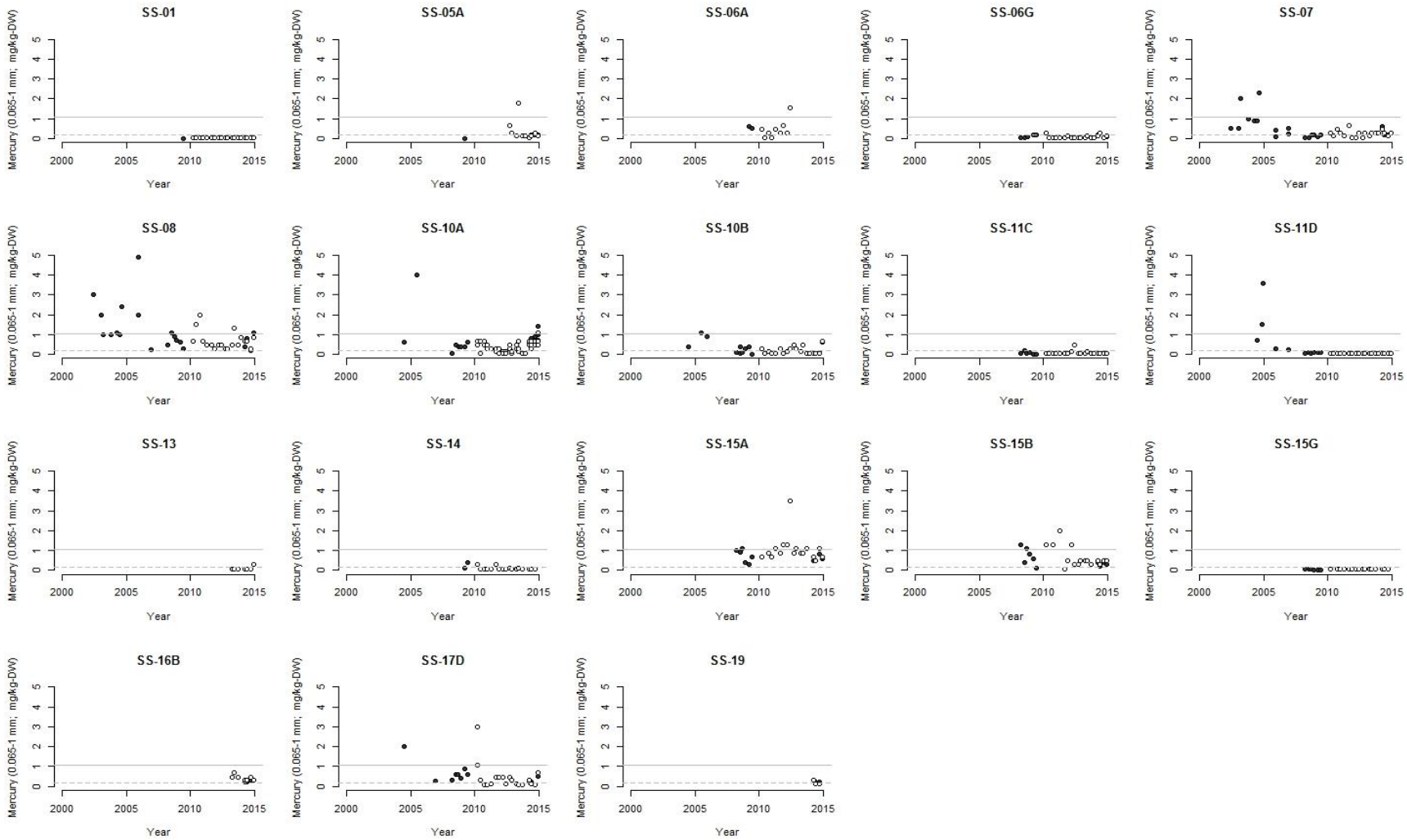

Figure 2-21. Time series plots of mid fraction (0.065-1 mm) mercury concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

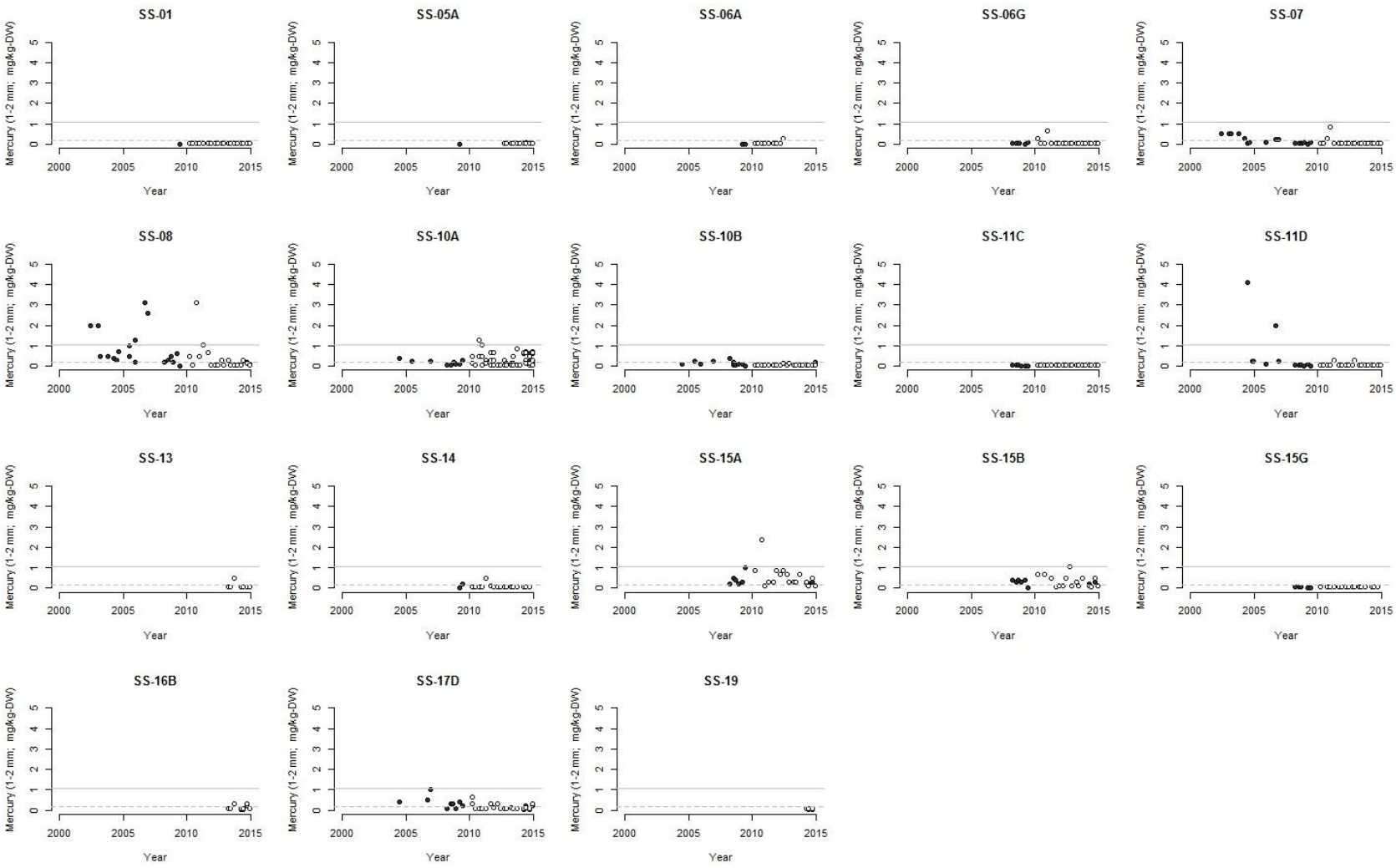

Figure 2-22. Time series plots of coarse fraction (1-2 mm) mercury concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

2.4.3.6 Zinc

Spatial patterns for sediment zinc concentrations [Figure 2-23] were similar to most of the other COC metals [e.g., Figure 2-11]. Highest weighted mean zinc concentrations were noted at the Silver Bow Creek sites above German Gulch, above the Butte Reduction Works, and above Sand Creek [Figure 2-23]. Lowest concentrations were in German Gulch and Blacktail Creek at Father Sheehan Park [Figure 2-23]. The spatial pattern for sediment zinc concentrations has been similar in each of years 2010-2014 although the magnitude of concentrations has been somewhat variable. Sediment zinc concentrations did not show a particularly distinct seasonal pattern [Figure 2-23]. Seven of 17 stations had the highest weighted mean concentrations in Q4, and three to four stations had the highest concentrations in either of Q1, Q2 or Q3 [Table 2-12].

Within SSTOU Subarea 1 and 2, weighted mean dry weight zinc concentrations exceeded the TEC at all eight Silver Bow Creek monitoring sites (SS-07, SS-08, SS-10A, SS-10B, SS-11C, SS-11D, SS-13, and SS-14) during all quarterly monitoring events in 2014 [Table 2-12]. Six Subarea 1 and 2 sites (SS-07, SS-08, SS-10A, SS-10B, SS-13, and SS-14) also exceeded the PEC during at least one quarter [Table 2-12]. In Subarea 3 and 4, weighted mean dry weight zinc concentrations exceeded the TEC at five of the six monitoring sites (SS-15A, SS-15B, SS-16B, SS-17D, and SS-19; Table 2-12). Four of the six sites, (SS-15A, SS-15B, SS-16B, and SS-17D) also exceeded the PEC during at least one quarter [Table 2-12]. Upstream from the SSTOU, all three monitoring sites (SS-01, SS-05A, and SS-06G) exceeded the TEC or the PEC at least once in 2014 and site SS-05A exceeded the PEC during all quarters [Table 2-12]. Overall, 60 of 66 samples for dry weight weighted mean zinc concentrations exceeded the TEC and 27 of 66 samples exceeded the PEC [Table 2-12].

Temporal trends for zinc concentrations at each site and in each size fraction through the monitoring period of record are presented in Figure 2-24 (<0.065 mm), Figure 2-25 (0.065-1 mm), and Figure 2-26 (1-2 mm).

Table 2-12. Total zinc concentrations (mg/kg dry weight) in quarterly instream sediment samples from Streamside Tailings Operable Unit monitoring stations, 2014. Sample concentrations are the weighted mean among three sediment size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm).

Site ID	Site Location	Sample Quarter			
		Q1	Q2	Q3	Q4
SS-01	Blacktail Creek at Father Sheehan Park	112.3	144.5	102.3	78.7
SS-05A	Silver Bow Creek above Butte Reduction Works	1018.4	1428.6	1936.6	1165
SS-06G	Silver Bow Creek above Butte WWTP	678.5	496.3	311.1	289.2
SS-07	Silver Bow Creek below Butte WWTP	1131.4	414.8	467	922.5
SS-08	Silver Bow Creek at Rocker	265.8	437.5	210.9	1192
SS-10A	Silver Bow Creek above Sand Creek	659.3	1228.5	913.9	1090.8
SS-10B	Silver Bow Creek below Sand Creek	203.1	369.5	222.6	682.4
SS-11C	Silver Bow Creek above Browns Gulch	196.8	405.6	242	227.1
SS-11D	Silver Bow Creek below Browns Gulch	149.6	264.2	155.2	413
SS-13	Silver Bow Creek in Reach L	242.3	289.2	277	782.3
SS-14	Silver Bow Creek at Miles Crossing	205.1	429.8	514.2	350.4
SS-15A	Silver Bow Creek above German Gulch	651.5	1228	1746.5	2083.2
SS-15G	German Gulch at mouth	48.1	42.2	49.1	---
SS-15B	Silver Bow Creek below German Gulch	619.8	415.1	656.3	591.4
SS-16B	Silver Bow Creek in Reach P near Fairmont	438.4	458.6	426.5	779.3
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	192.9	545	267.2	583.8
SS-19	Silver Bow Creek at Frontage Road	315.1	291.3	250.3	---

--- Not sampled

Exceeds the threshold effect concentration [MacDonald et al., 2000].

Exceeds the probable effect concentration [MacDonald et al., 2000].

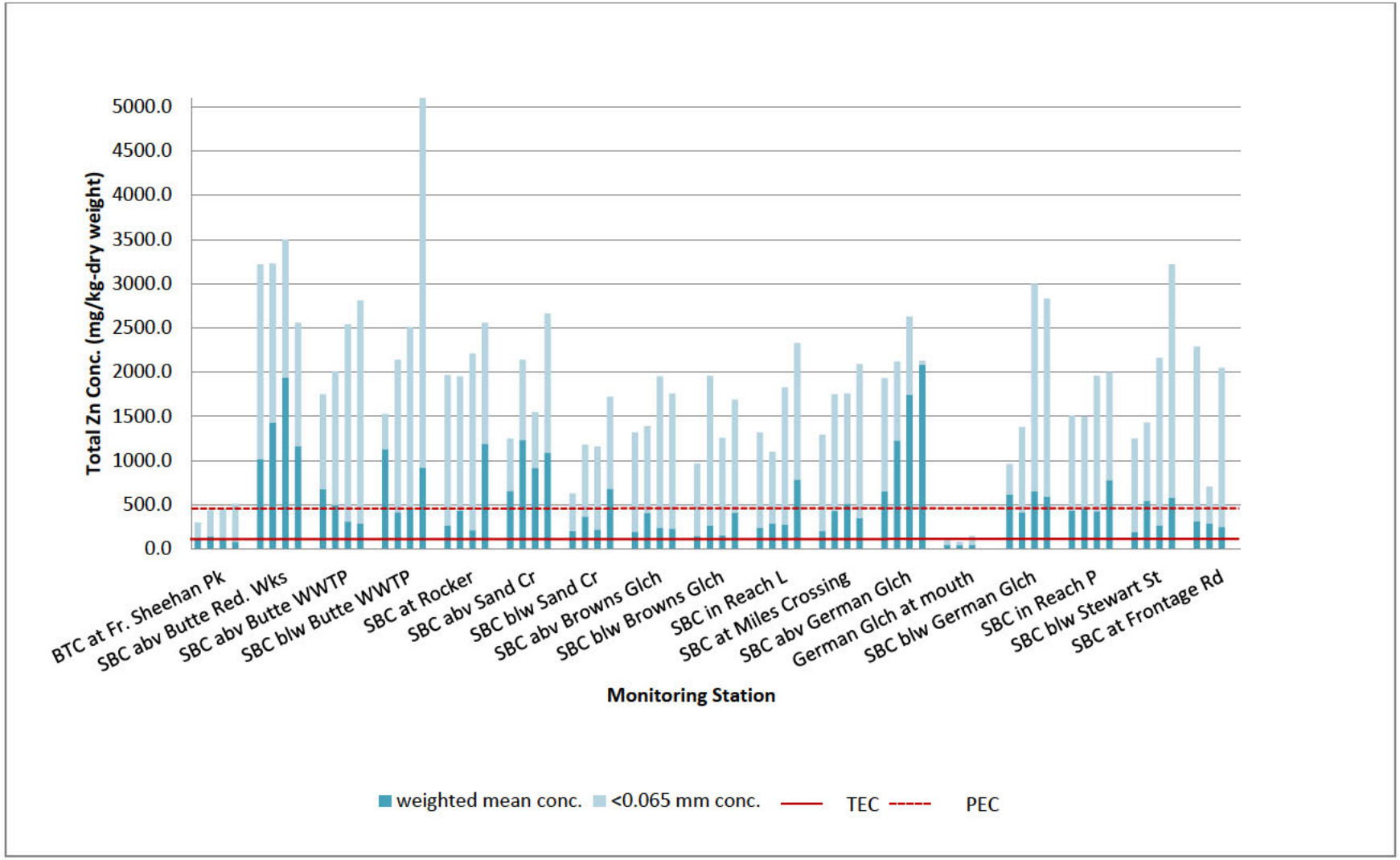

Figure 2-23. Total zinc concentrations in quarterly instream sediment samples collected at Streamside Tailings Operable Unit monitoring stations, 2014. Solid red line is the "threshold effect concentration" (TEC) and the dashed red line is the "probable effect concentration" (PEC) [MacDonald et al., 2000]. Missing bars indicate that samples were not collected due to channel ice.

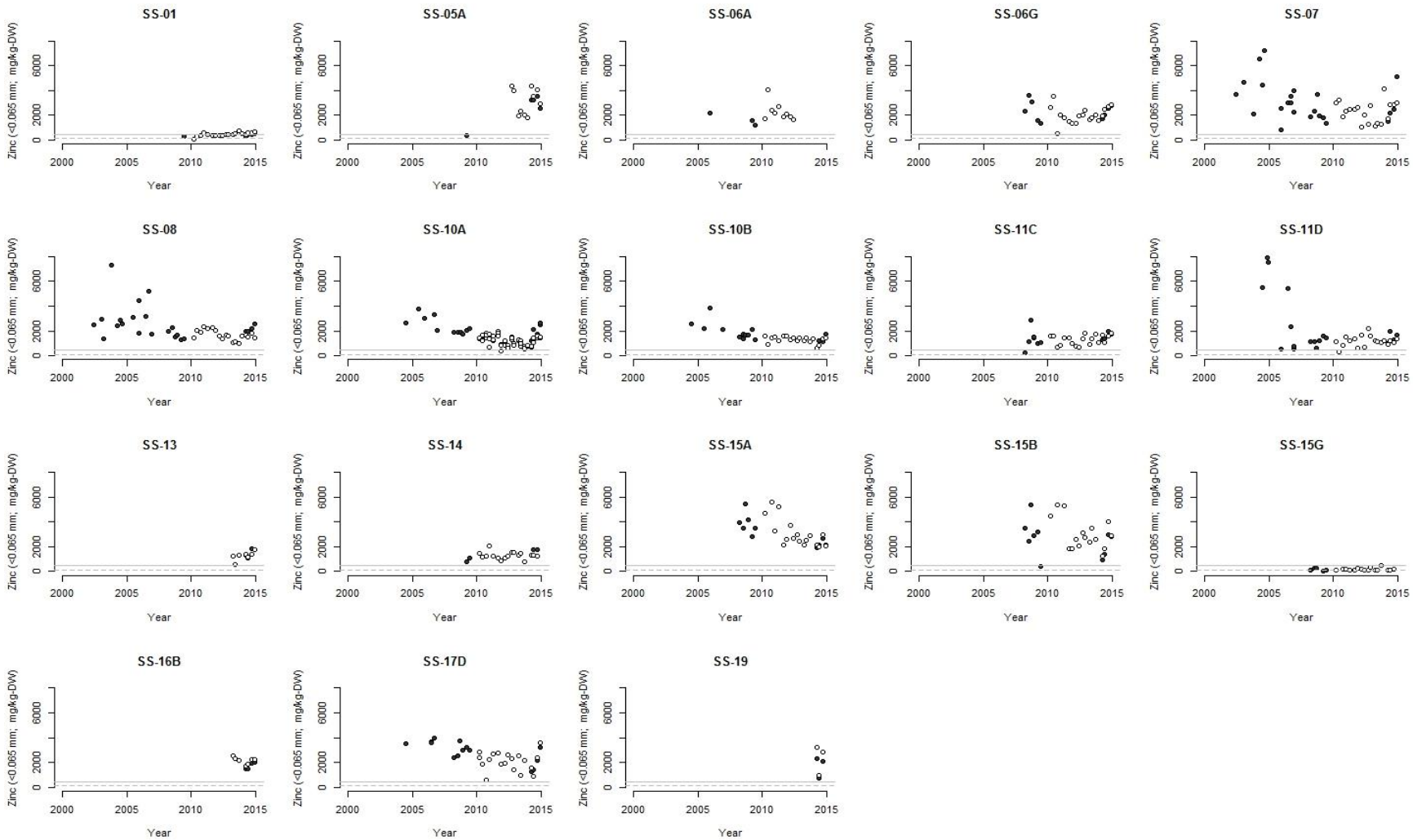

Figure 2-24. Time series plots of fine fraction (<0.065 mm) zinc concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

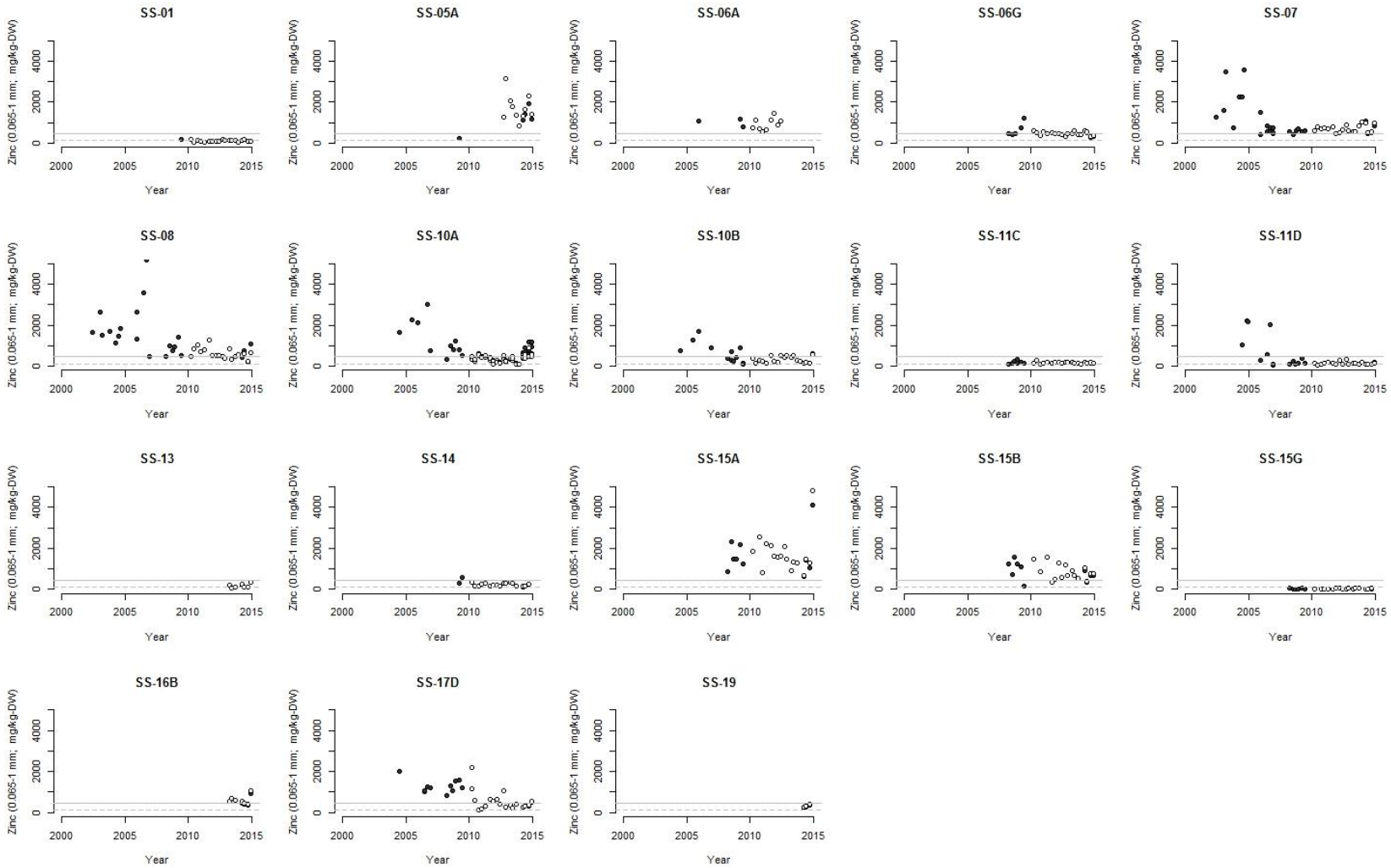

Figure 2-25. Time series plots of mid fraction (0.065-1 mm) zinc concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

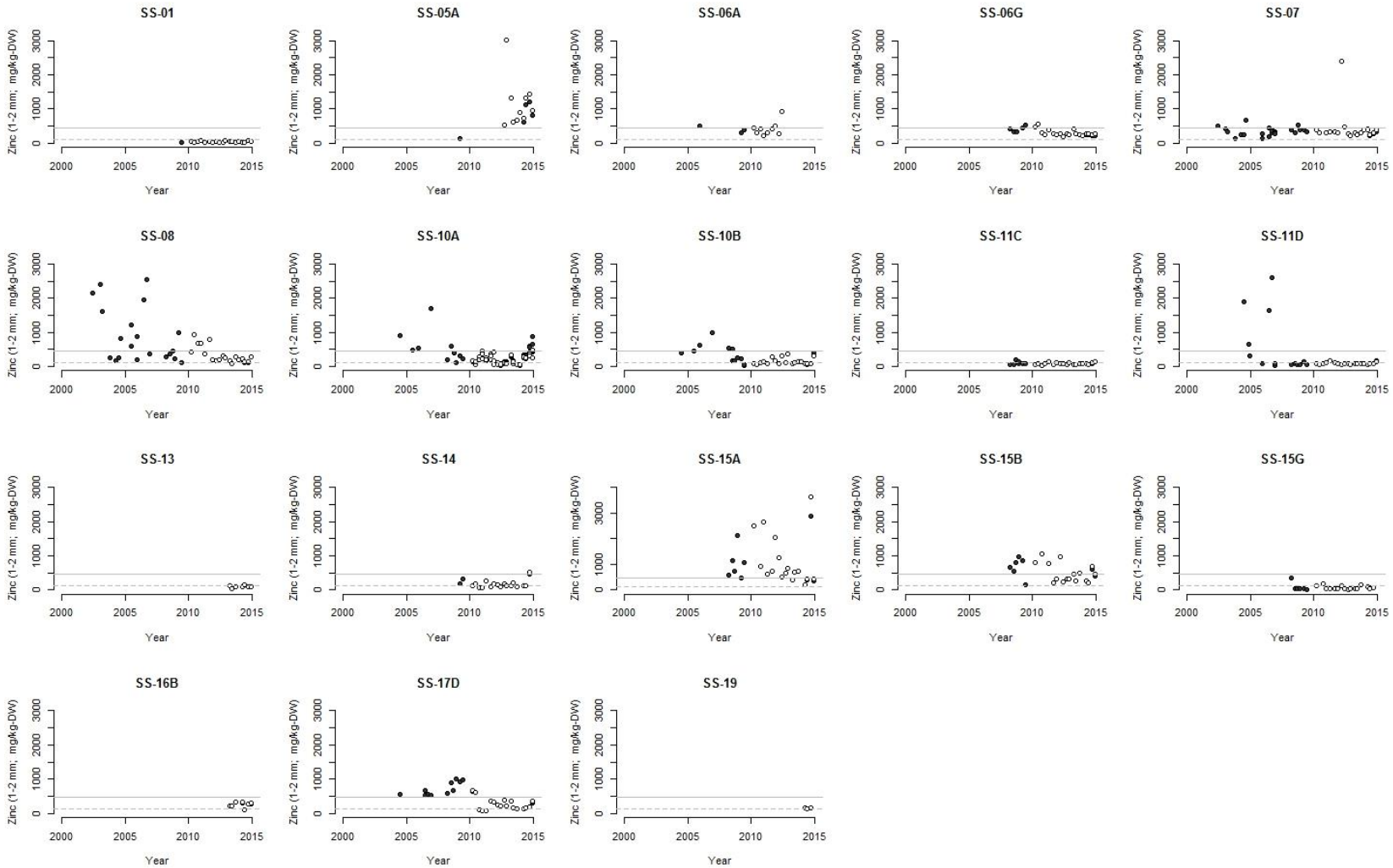

Figure 2-26. Time series plots of coarse fraction (1-2 mm) zinc concentrations (mg/kg dry weight) in instream sediment samples from the Streamside Tailings Operable Unit, 2002-2014. Black circles are measured concentrations; white circles are estimated dry weight concentrations from measured wet weight concentrations. Solid line represents "probable effect concentration" and dashed line represents "threshold effect concentration" [MacDonald et al., 2000].

2.4.4 Other Metals

Summary statistics for non-COC sediment concentrations are presented by sediment size fraction and by analysis unit (i.e., wet weight or dry weight) in Table 2-13. Actual sample concentrations for all non-COCs are available in Appendix D. Two of the non-COCs have identified reference values [MacDonald et al., 2000]; chromium and nickel. Therefore, exceedances of the reference values for chromium and nickel are discussed further.

Chromium exceeded the TEC (43.4 mg/kg-DW) in 68% (45 of 66) of the samples and exceeded the PEC (111 mg/kg-DW) in 24% (16 of 66) of the samples in the fine sediment size fraction (<0.065 mm). There were no exceedances of the chromium TEC or PEC in any other sediment size fraction. Exceedances of the chromium TEC in the fine sediment size fraction (<0.065 mm) occurred in all SSTOU sample sites and exceedances of the PEC in that size fraction occurred in all sites except German Gulch (SS-15G) and Silver Bow Creek at Frontage Road (SS-19).

Nickel exceeded the TEC (22.7 mg/kg-DW) in 70% (46 of 66) of the samples and exceeded the PEC (48.6 mg/kg-DW) in 27% (18 of 66) of the samples in the fine sediment size fraction (<0.065 mm). There were no exceedances of the nickel TEC or PEC in any other sediment size fraction. Exceedances of the nickel TEC in the fine sediment size fraction (<0.065 mm) occurred in all SSTOU sample sites and exceedances of the PEC in that size fraction occurred in all sites except German Gulch (SS-15G) and Silver Bow Creek above Sand Creek (SS-10A) and at Frontage Road (SS-19).

Table 2-13. Summary statistics for sediment metal concentrations (stratified by size fraction and measurement unit [i.e., wet weight or dry weight]) in the Streamside Tailings Operable Unit (SSTOU), 2014. No metals in this table are contaminants of concern in the SSTOU.

Metal	Size Fraction	Reporting Limit (mg/kg)	Minimum (mg/kg)	Maximum (mg/kg)	Mean (mg/kg)	Standard Deviation (mg/kg)
Wet Weight						
Aluminum	<0.065 mm	5	5,120	17,700	9,335	2,390
	0.065-1 mm	5	2,510	11,500	4,940	2,164
	1-2 mm	5	1,940	19,100	5,374	4,073
Antimony	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	ND	---	---
Barium	<0.065 mm	5	43	254	123	42
	0.065-1 mm	5	32	142	85	26
	1-2 mm	5	26	224	87	44
Beryllium	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	ND	---	---
Boron	<0.065 mm	5	ND	6	---	---
	0.065-1 mm	5	ND	6	---	---
	1-2 mm	5	ND	ND	---	---
Chromium	<0.065 mm	5	5	124	26	21
	0.065-1 mm	5	ND	30	11	5
	1-2 mm	5	ND	22	9	4
Cobalt	<0.065 mm	5	ND	9	7	1
	0.065-1 mm	5	ND	11	8	2
	1-2 mm	5	ND	6	---	---
Iron	<0.065 mm	5	5,460	23,200	11,638	3,872
	0.065-1 mm	5	4,720	48,100	14,689	9,772
	1-2 mm	5	3,580	18,700	7,783	3,165
Manganese	<0.065 mm	5	211	4,590	791	615
	0.065-1 mm	5	95	1,640	433	272
	1-2 mm	5	80	2,230	460	370
Molybdenum	<0.065 mm	5	ND	16	---	---
	0.065-1 mm	5	ND	9	---	---
	1-2 mm	5	ND	16	---	---
Nickel	<0.065 mm	5	ND	72	---	---
	0.065-1 mm	5	ND	15	---	---
	1-2 mm	5	ND	9	---	---
Selenium	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	ND	---	---
Silver	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	6	---	---
Uranium	<0.065 mm	5	ND	8	---	---
	0.065-1 mm	5	ND	7	---	---
	1-2 mm	5	ND	ND	---	---
Vanadium	<0.065 mm	1	9	58	28	12
	0.065-1 mm	1	12	106	36	22
	1-2 mm	1	6	30	15	4
Dry Weight						
Aluminum	<0.065 mm	6	17,800	53,000	28,394	7,676

	0.065-1 mm	5	3,150	21,600	7,645	5,098
	1-2 mm	5	2,430	38,400	8,314	8,718
Antimony	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	ND	---	---
Barium	<0.065 mm	5	129	730	371	117
	0.065-1 mm	5	41	297	127	57
	1-2 mm	5	30	421	126	88
Beryllium	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	ND	---	---
Boron	<0.065 mm	5	ND	25	---	---
	0.065-1 mm	5	ND	11	---	---
	1-2 mm	5	ND	10	---	---
Chromium	<0.065 mm	5	17	366	83	76
	0.065-1 mm	5	ND	39	---	---
	1-2 mm	5	ND	29	---	---
Cobalt	<0.065 mm	5	ND	27	---	---
	0.065-1 mm	5	ND	14	---	---
	1-2 mm	5	ND	8	---	---
Iron	<0.065 mm	6	18,200	66,300	34,615	8,781
	0.065-1 mm	5	6,060	61,500	20,776	12,236
	1-2 mm	5	4,240	26,400	10,933	5,737
Manganese	<0.065 mm	5	423	13,500	2,374	1,791
	0.065-1 mm	5	128	2,050	638	410
	1-2 mm	5	99	2,710	647	527
Molybdenum	<0.065 mm	5	ND	45	---	---
	0.065-1 mm	5	ND	12	---	---
	1-2 mm	5	ND	18	---	---
Nickel	<0.065 mm	5	10	213	43	39
	0.065-1 mm	5	ND	19	---	---
	1-2 mm	5	ND	14	---	---
Selenium	<0.065 mm	5	ND	ND	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	ND	---	---
Silver	<0.065 mm	5	ND	13	---	---
	0.065-1 mm	5	ND	ND	---	---
	1-2 mm	5	ND	7	---	---
Uranium	<0.065 mm	5	ND	22	---	---
	0.065-1 mm	5	ND	10	---	---
	1-2 mm	5	ND	6	---	---
Vanadium	<0.065 mm	1	28	173	82	27
	0.065-1 mm	1	15	133	50	28
	1-2 mm	1	8	44	20	7

ND Not detected at analytical reporting limit.
--- Not calculated because one or more samples had concentrations below the reporting limit.

2.4.5 Data Validation

Data quality objectives (DQOs) were evaluated for sampling precision. To evaluate sampling precision, eight paired field sample and field duplicate concentrations were compared. In each field sample and duplicate pair, 126 comparisons were made; comparisons were made for each pair of 21 metals, in three size fractions (<0.065 mm, 0.065–1 mm, and 1–2 mm), and two measurement units (wet weight and dry weight). In total, there were 1,008 sample and duplicate pairs. Of those pairs, 47% (478 of 1,008) had concentrations which were ≥500% of the analytical reporting limit (RL) and relative percent difference (RPD) comparisons were made between the field sample and duplicate sample for those 478 analyte pairs. Not counting the 530 pairs with concentration which were <500% of the RL, 52 of 478 (10.9%) had RPDs greater than the DQO specified for sampling precision (40%).

2.5 DISCUSSION

2.5.1 Sample Size Fraction

Sediment data collected in the SSTOU in 2014 and prior years have demonstrated that the sediment size fraction is strongly related (inversely) to most metal concentrations, and these results are consistent with the findings of others [Horowitz and Ehrlick, 1987; Jain and Ram, 1997]. The reason for this disparity in metal concentrations by size fraction is primarily because finer sediments have greater surface area for adsorption of metals [Horowitz and Ehrlick, 1987]. Therefore, when evaluating weighted mean sample concentrations, samples with higher percentages of fine sediments will generally have higher sample concentrations.

The sample collection method requires that samples are collected and composited from at least five depositional areas, which provides a more representative sample than one collected from a single depositional area [MDEQ, 2012b]. The weighted mean concentrations have been compared to the reference values (TEC and PEC) in this report in order to provide the most representative composite sample concentration for all sediments (<2 mm) at each site. However, for comparisons of sediment metal concentrations through time (or space) it is probably more useful to compare concentrations in the same size fractions to eliminate the confounding influence of varying size fraction proportions among disparate samples. Variance in the proportion of each size fraction within each sample was highly variable between sites and between sample periods even for the same site.

2.5.2 Comparison of Wet Weight and Dry Weight Concentrations

Wet weight COC concentrations explained 76-97% of the variation in dry weight concentrations depending on which particular COC and size fraction was considered. These relatively close fitting, linear relationships allow for relatively accurate estimation of dry weight concentrations from wet weight concentrations (or vice versa). These estimates are important in

order to compare sediment concentrations measured in this monitoring program from 2002-2009 (measured as dry weight) to those from 2010-2013 (measured as dry weight). We believe these 2014 samples, collected as dry weight and wet weight concentrations, provide sufficient data to make informed estimates. Continuing to analyze sediment concentrations as both wet weight and dry weight concentrations in 2015 and later years would likely provide little benefit in terms of reduced estimation error. Therefore, we recommend analyzing all sediment concentrations as dry weight in 2015 and later years to minimize analysis costs.

2.5.3 Contaminants of Concern

There appears to be a major source, or sources, of metal contamination to sediments in Butte somewhere between the Blacktail Creek site (SS-01) and the Silver Bow Creek above Butte Reduction Works site (SS-05A). In 2014, all sediment COC concentrations increased sharply (by 4-5 times) in both the weighted mean and fine fraction (<0.065 mm) concentrations between those sites. This sharp increase has been consistently observed since quarterly monitoring began at SS-05A in September 2012[12] [Ingman et al., 2013c; 2013d; 2015b]. Sites SS-01 and SS-05A are approximately three miles apart and each are located upstream from the SSTOU. Therefore, these sample sites provide limited insight into the specific location of the sediment source, or sources, in Butte other than that these source(s) are located somewhere upstream from SS-05A. Site SS-05A is located immediately downstream (i.e., within 100 yards) from the downstream end of the "Slag Canyon", which is located just downstream from Montana Avenue in Butte.

Downstream from site SS-05A, arsenic, copper, lead, and zinc concentrations generally decreased sequentially at each downstream site through Subarea 1 and 2 (to SS-14; Silver Bow Creek at Miles Crossing). This trend may suggest that COCs in sediments upstream from the SSTOU are mobilized and are recontaminating sites in the SSTOU throughout Subarea 1 and 2.

In Subarea 3 and 4, recent remediation appears to be directly influencing COC concentrations. Although all COC concentrations remain elevated at each Subarea 3 and 4 site (excluding the German Gulch site) relative to the reference values, concentrations appear to be decreasing steadily through time. For example, at the Subarea 3 site immediately upstream from German Gulch (SS-15A), all COC concentrations in the most contaminated size fraction (<0.065 mm) have declined through time at a steady rate. Remediation was recently completed upstream from SS-15A. However, there were some limited tailings in the streambed and streambanks from about 100 yards above to 200 yards below SS-15A which were left to flush out over time. No active remediation was planned because the stream passes through a very narrow canyon (~30 m) and the streambed is comprised primarily of bedrock indicating that the volume of tailings is quite small. During recent monitoring, some erosion of these streambanks immediately upstream from SS-15A was noted. This situation may result in continued elevated COC concentrations in streambed sediments at SS-15A for some time. Despite these

[12] Prior to September 2012 monitoring occurred at site SS-06A which is located approximately 0.5 miles downstream from site SS-05A. Site SS-06A was discontinued in September 2012 and replaced by site SS-05A because beaver activity made sampling at SS-06A impractical.

circumstances, long-term monitoring appears to clearly demonstrate that remediation upstream has resulted in decreased COC concentrations at SS-15A and other Subarea 3 and 4 sites.

2.5.4 Data Validation

Some DQOs were exceeded for sampling precision. Of the 1,008 field sample and field duplicate pairs compared, 52 exceeded the specified DQO for sampling precision (RPD >40%). All associated data will be "J" flagged in the project database as described in the quality assurance project plan [Naughton et al., 2014b].

3.0 GROUNDWATER

3.1 INTRODUCTION

This chapter describes groundwater sampling data collected in 2014 to assess the effectiveness of remedial actions implemented within the Streamside Tailings Operable Unit (SSTOU) of the Silver Bow Creek/Butte Area National Priorities List site. Data was collected to describe the effect of remedial actions on groundwater quality and progress toward attainment of performance goals. Groundwater contamination is among the environmental concerns for Silver Bow Creek and may pose a threat to human health and the environment. An objective of remediation in the SSTOU is to reduce loading of contaminants from floodplain soils to groundwater and surface water.

3.2 PERFORMANCE GOALS

The SSTOU ROD specifies that the final remediation standards for groundwater COC concentrations are to, "Attain compliance with applicable Circular WQB-7 standards, federal MCLs (maximum contaminant levels) and federal nonzero maximum contaminant level goals (MCLGs) for all SSTOU groundwater." Moreover, "The groundwater levels to be attained consist of the more stringent of the MCL, any nonzero MCLG, or the WQB-7 human health standard for each parameter." While more stringent standards promulgated since the issuance of the ROD have not yet been formally adopted as performance standards for this operable unit, this monitoring report uses the more stringent of the ROD's Circular WQB-7 standards [MDHES, 1994] or current Circular DEQ-7 standards [MDEQ, 2012a] as the goal to be attained for purposes of evaluation. The most stringent of these standards for each COC is shown in Table 3-1.

Table 3-1. Comparison of the state of Montana groundwater goals in July 1994 (effective at the time of issuance of the Streamside Tailings Operable Unit Record of Decision) and October 2012 (effective in 2014) for each contaminant of concern. Gray cells indicate the most restrictive standard.

Contaminant of concern	Human health groundwater standard	
	MDHES [1994]	MDEQ [2012a]
Arsenic	0.018	0.010
Cadmium	0.00500	0.00500
Copper	1.000	1.300
Lead	0.0150	0.0150
Mercury	0.00014	0.000050
Zinc	5.0	2.0

3.3 METHODS

The purpose of the groundwater monitoring program is to collect data describing the temporal and spatial variation of metal and ion concentrations for groundwater in the SSTOU. These data provide a long-term record of environmental conditions in the SSTOU. As of 2014, 13 years of SSTOU groundwater data (2002-2014) have been collected under this monitoring program. This long-term record provides data to evaluate the effect of remediation on environmental conditions in the SSTOU over time. Improvement to groundwater quality may require long time periods (i.e., decades) following completion of remediation within the SSTOU.

Changes to the groundwater monitoring program have occurred over time and a record of these changes is provided in the program sampling and analysis plan [Naughton et al., 2014a]. The program attempts to adhere to monitoring requirements specified in the SSTOU ROD [Table 3-2].

Table 3-2. Minimum post-remedy monitoring requirements specified in the Record of Decision for the Streamside Tailings Operable Unit [MDEQ and USEPA, 1995].

Locations/Physical	Analytical Parameters	Analytes
Near Colorado Tailings, Rocker, Silver Bow, Nissler, Ramsay Flats, Miles Crossing, Fairmont, Crackerville, Stuart, Opportunity, STARS *in situ* treatment areas and every repository location.	Metals (dissolved)	Arsenic, cadmium, copper, lead, mercury, zinc
	Common ions	Calcium, magnesium, sodium, potassium, chloride, sulfate
	Physical properties	Temperature, acidity (pH), oxidation-reduction potential (Eh), conductance, dissolved oxygen concentration

3.3.1 Monitoring Locations

In 2014, remediation in the SSTOU was completed in all sections of Subareas 1, 2, and 4 and in progress in portions of Subarea 3 [Figure 3-1; Table 3-3]. Monitoring occurred in nine well cluster areas within the SSTOU. Each well cluster consisted of three wells; two monitoring wells located within the stream floodplain and one background well located outside the floodplain and adjacent to the monitoring wells. The Mine Waste Relocation Repository (MWRR) well cluster is located outside the floodplain at a site where approximately 171,900 cubic yards of contaminated soil from Reach A of Subarea 1 were deposited [USEPA, 2011]. The MWRR site consists of five monitoring wells and one background well located up-gradient from the MWRR. Well cluster locations were selected based on SSTOU ROD requirements [Table 3-2].

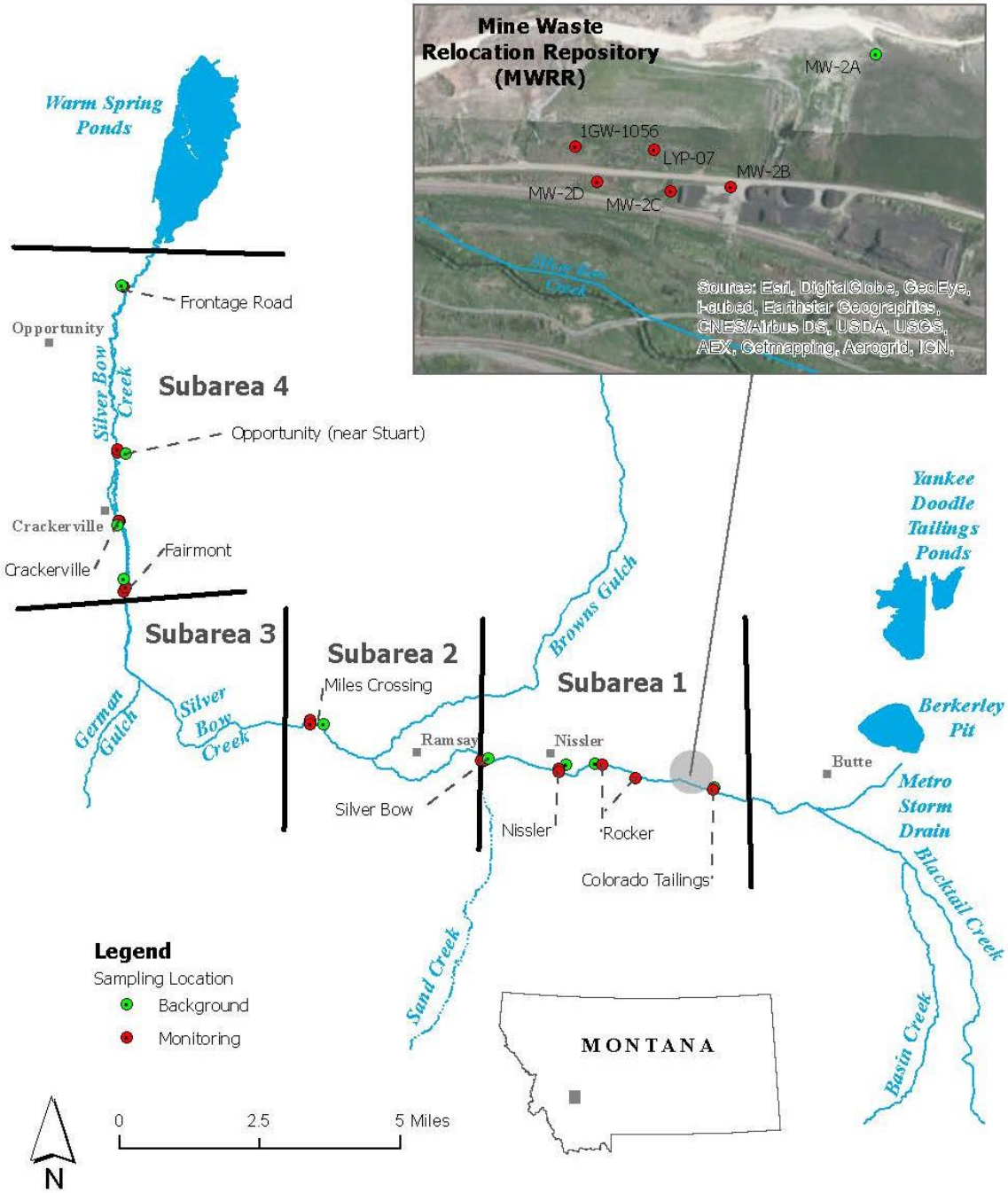

Figure 3-1. Sampling locations for groundwater monitoring in the Streamside Tailings Operable Unit, 2014.

Table 3-3. Sampling locations for groundwater monitoring in the Streamside Tailings Operable Unit, 2014.

Well Cluster	Well ID	Well Purpose	Location (GPS coordinates, NAD 83)	
			Latitude	Longitude
Colorado Tailings	GW-1010R	Background	45.99979	-112.57561
	P-06A	Floodplain	45.99940	-112.57622
	GW-1052R	Floodplain	45.99916	-112.57624
Rocker	GW-RK-BG	Background	46.00483	-112.62020
	MW-10	Floodplain	46.00447	-112.61734
	MW-01	Floodplain	46.00155	-112.60496
Nissler	GW-1003R	Background	46.00405	-112.63095
	1GW-1004A	Floodplain	46.00307	-112.63343
	P-58A	Floodplain	46.00211	-112.63355
Silver Bow	P-39R	Floodplain	46.00440	-112.66235
	P-37A	Floodplain	46.00449	-112.66112
	P-114	Background	46.00508	-112.65941
Miles Crossing	GW-MC-NS	Floodplain	46.01300	-112.72600
	GW-MC-SS	Floodplain	46.01200	-112.72600
	GW-MC-BG	Background	46.01200	-112.72100
Mine Waste Relocation Repository (MWRR)	1GW-1056	Monitoring	46.00263	-112.58615
	LYP-07	Monitoring	46.00264	-112.58483
	MW-2A	Background	46.00386	-112.58114
	MW-2B	Monitoring	46.00223	-112.58350
	MW-2C	Monitoring	46.00215	-112.58451
	MW-2D	Monitoring	46.00223	-112.58577
Fairmont	GW-FM-ES	Floodplain	46.04400	-112.79692
	GW-FM-WS	Floodplain	46.04510	-112.79601
	GW-FM-BG	Background	46.04711	-112.79700
Crackerville	GW-CR-ES	Floodplain	46.06211	-112.79942
	GW-CR-WS	Floodplain	46.06196	-112.79980
	GW-CR-BG	Background	46.06112	-112.79994
Stuart	GW-ST-ES	Floodplain	46.07975	-112.80107
	GW-ST-WS	Floodplain	46.08053	-112.80146
	GW-ST-BG	Background	46.07939	-112.79810
Frontage Road	GW-FR-ES	Floodplain	46.12223	-112.80167
	GW-FR-WS	Floodplain	46.12250	-112.80225
	GW-FR-BG	Background	46.12263	-112.80268

3.3.2 Monitoring Schedule

Groundwater was monitored during low streamflow periods at all wells from September 3-5, 2014 to describe spatial variation in shallow groundwater chemistry within the SSTOU. At the MWRR well cluster, monitoring also occurred on June 4, 2014 during the spring snowmelt runoff period.

3.3.3 Monitoring Parameters

Groundwater samples were analyzed for the parameters and analytes listed in Table 3-4.

Table 3-4. Sampling parameters and analytes for groundwater monitoring of the Streamside Tailings Operable Unit, 2014.

Parameter	Analytes
Concentrations of metal contaminants of concern (dissolved)	Arsenic, cadmium, copper, lead, mercury, zinc
Concentrations of other metals (dissolved)	Aluminum, antimony, barium, beryllium, boron, cobalt, chromium, iron, manganese, molybdenum, nickel, selenium, uranium, vanadium
Common ion concentrations (total)	Sulfate, total alkalinity, bicarbonate alkalinity, calcium, magnesium, sodium, potassium, chloride
Other physical properties	Total suspended sediment (TSS) concentration, hardness, water temperature, pH, specific conductivity, dissolved oxygen (DO), turbidity

3.3.4 Sample Collection and Analysis

Sample collection and analysis procedures are described in the project sampling and analysis plan (SAP) [Naughton et al., 2014a] and quality assurance and quality control procedures are described in the program quality assurance project plan (QAPP) [Naughton et al., 2014b]. Sample collection methods generally followed standard operating procedures (SOPs) developed for the Clark Fork River [AR, 1992]. Field sampling procedures were in accordance with MDEQ [2012b] and followed "clean hands/dirty hands" procedures as described in USGS [2006]. Dedicated, or disposable, well bailers were used in low yield wells where installation of a submersible pump was impractical. Field parameters (water temperature, pH, dissolved oxygen concentration, and conductivity) were measured during each monitoring event with a field multimeter (YSI Professional Plus). Dissolved metal samples were filtered in the laboratory rather than in the field because some wells had high levels of suspended sediment which made field filtering impractical. Samples were analyzed by Energy Laboratories (Helena, Montana). Laboratory analysis procedures for each analyte are presented in Table 3-5.

Table 3-5. Analytes, methods, and reporting limits for groundwater sampling in the Streamside Tailings Operable Unit, 2014.

Analyte	Requested Method	Requested Reporting Limit (mg/L)[13]	Holding Time (days)	Bottle	Preservative
Water Samples - Physical Properties and Inorganics					
Alkalinity, Total (as CaCO3)	A 2320 B	4	14		
Alkalinity, Bicarbonate (as HCO3)	A 2320 B	4	14		
Chloride	EPA 300.0	1	7		
Sulfate	EPA 300.0	1	7		
Hardness (as CaCO3)	A 2340 B	1	180		
Water Samples - Dissolved Metals (0.45 µm filtered)					
Aluminum	EPA 200.7	0.009	180	250 mL HDPE	HNO3 to pH <2
Antimony	EPA 200.8	0.0005			
Arsenic	EPA 200.8	0.001			
Barium	EPA 200.8	0.003			
Beryllium	EPA 200.8	0.0008			
Boron	EPA 200.7	0.1			
Cadmium	EPA 200.8	0.00003			
Calcium	EPA 200.7	1			
Chromium	EPA 200.8	0.01			
Cobalt	EPA 200.8	0.01			
Copper	EPA 200.8	0.001			
Iron	EPA 200.7	0.02			
Lead	EPA 200.8	0.0003			
Magnesium	EPA 200.8	1			
Manganese	EPA 200.8	0.001			
Mercury	EPA 245.1	0.000005			
Molybdenum	EPA 200.8	0.005			
Nickel	EPA 200.8	0.002			
Potassium	EPA 200.7	1			
Selenium	EPA 200.8	0.001			
Silver	EPA 200.8	0.0002			
Sodium	EPA 200.7	1			
Uranium	EPA 200.8	0.0002			
Vanadium	EPA 200.8	0.1			
Zinc	EPA 200.8	0.008			

3.3.5 Data Analysis

3.3.5.1 Metal Contaminants of Concern

For each sample, the concentration for each metal COC in 2014 was compared to the state of Montana groundwater standards [Table 3-1]. Additionally, to provide the temporal trend of each COC concentration in each well, all COC concentrations throughout the monitoring period of record were plotted through time[14]. In each well cluster, COC concentrations were grouped

[13] Requested reporting limits are either the required reporting limit of MDEQ [2012a] or the lowest reporting limit previously provided by the analytical laboratory, whichever is lower.

[14] Groundwater monitoring methods and data from prior years may be found in Confluence [2007; 2008; 2009, 2010a], DeArment et al. [2011b; 2013a] and Naughton et al. [2013a; 2015a].

according to the well purpose (i.e., background or monitoring) and narrative discussions are focused on the comparison of background to monitoring well in each cluster.

3.3.5.2 Other Metals and Common Ions

Concentrations of non-COC metals and common ions from 2014 were tabulated. For those metals with MDEQ [2012a] groundwater standards, the 2014 samples are compared to those standards.

3.3.6 Data Validation

Data quality objectives (DQOs) were established in the SSTOU monitoring project QAPP for "data representativeness", "comparability", "completeness", "sensitivity", "precision", "bias", and "accuracy" [Naughton et al., 2014b]. Methods for field and laboratory quality assurance and quality control (QA/QC) procedures are also described in detail in the project QAPP [Naughton et al., 2014b]. A completed QA/QC checklist, summary tables of field duplicate and field blank results, and assessments of data quality objectives are included in Appendix A.

3.4 RESULTS

3.4.1 Mine Waste Relocation Repository

3.4.1.1 Contaminants of Concern

In June 2014, no MWRR monitoring wells had samples with metal COC concentrations which exceeded the MDEQ [2012a] groundwater standard [Table 3-6]. However, the background well (MW-2A) had an arsenic concentration which was 1.1 times the standard [Table 3-6]. In September 2014, no background or monitoring wells in the MWRR cluster had a COC concentration exceeding any MDEQ [2012a] groundwater standard [Table 3-6].

Table 3-6. Dissolved metal (contaminant of concern) concentrations (mg/L) in groundwater monitoring wells of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014.

Site	Arsenic	Cadmium	Copper	Lead	Mercury	Zinc
June						
MW-2A*	0.011	ND	ND	ND	ND	ND
1GW-1056	0.007	ND	ND	ND	ND	ND
LYP-07	0.003	ND	ND	ND	ND	ND
MW-2B	0.010	ND	0.002	ND	0.000005	ND
MW-2C	0.006	ND	ND	ND	ND	ND
MW-2D	0.007	ND	0.004	0.0013	0.000005	0.011
September						
MW-2A*	0.010	ND	ND	ND	ND	ND
1GW-1056	0.007	ND	ND	ND	ND	ND
LYP-07	ND	ND	ND	ND	ND	0.020
MW-2B	0.010	ND	0.002	ND	ND	ND
MW-2C	0.006	ND	ND	ND	ND	ND
MW-2D	0.006	ND	0.005	ND	ND	0.012

ND Not detected at analytical reporting limit.

* Background well.

Exceeds human health groundwater standard [MDEQ, 2012a].

3.4.1.1.1 Arsenic

Based on the monitoring period of record in the MWRR, arsenic concentrations have been consistent at each well since monitoring began in 2006 [Figure 3-2]. All monitoring wells have had arsenic concentrations which were less than or similar to the background well concentration throughout the period of record [Figure 3-2]. There does not appear to be an increasing trend at any well with the exception of MW-2B [Figure 3-2]. Well MW-2B does appear to have a slightly increasing trend through time, although concentrations in MW-2B do not exceed concentrations in the background well [Figure 3-2].

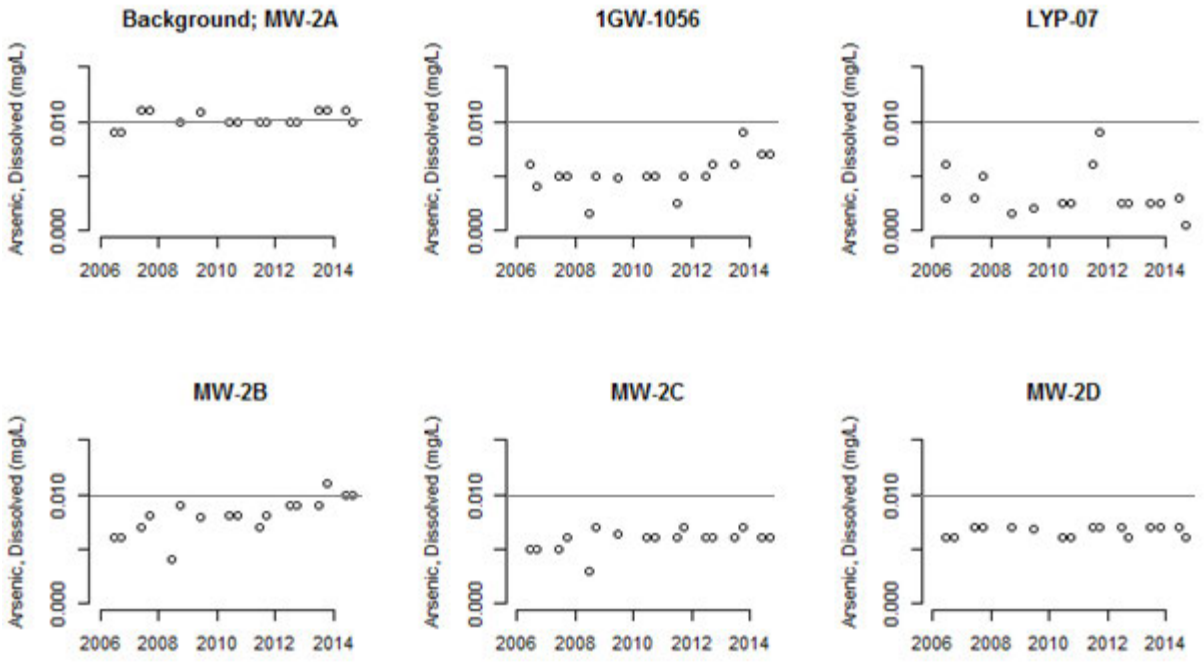

Figure 3-2. Arsenic concentrations in groundwater wells in the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.1.1.2 Cadmium

Based on the monitoring period of record in the MWRR, almost all samples had cadmium concentrations which are below the analytical reporting limit [Figure 3-3]. There is no indication that cadmium concentrations are increasing through time in any of the MWRR wells [Figure 3-3].

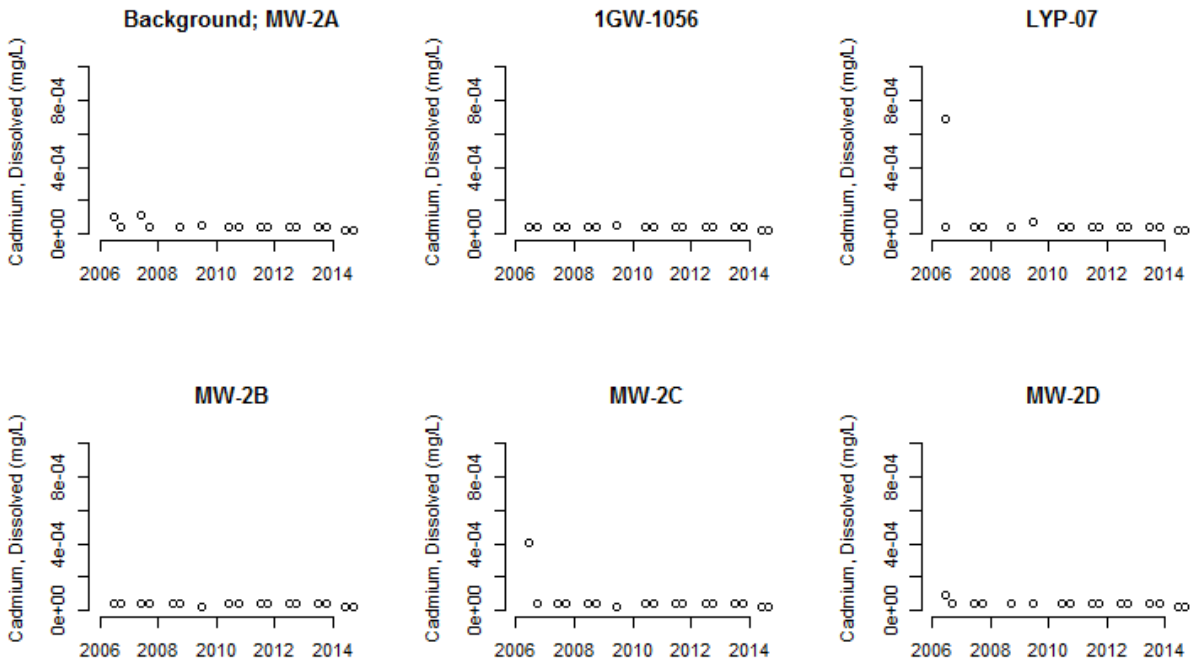

Figure 3-3. Cadmium concentrations in groundwater wells in the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2006-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.1.1.3 Copper

Based on the monitoring period of record in the MWRR, copper concentrations were low (≤0.009 mg/L) in all samples collected since 2006 [Figure 3-4]. Three of the monitoring wells (1GW-1056, LYP-07, MW-2C) have had concentrations similar to the background well (MW-2A) during almost all monitoring periods [Figure 3-4]. Copper concentrations have been marginally higher in two monitoring wells (MW-2B and MW-2D) compared to the background well (MW-2A) and each monitoring well has had marginally higher concentrations in the last few sample periods [Figure 3-4]. However, concentrations remain far below the MDEQ [2012a] groundwater standard (1.3 mg/L).

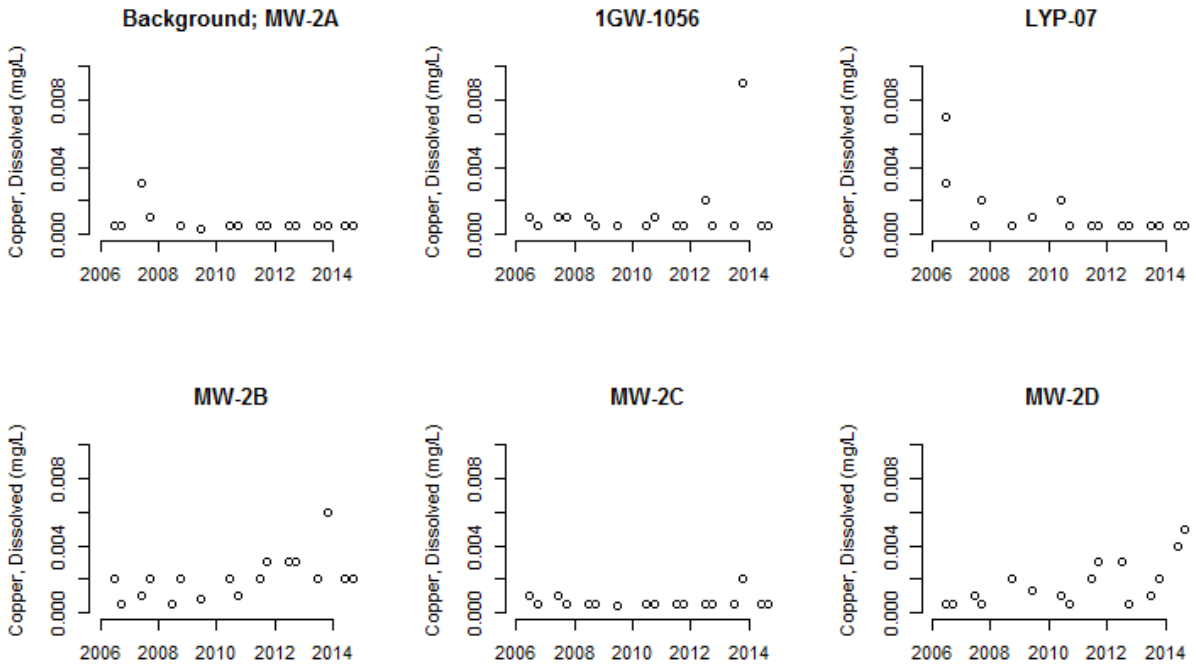

Figure 3-4. Copper concentrations in groundwater wells in the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2006-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.1.1.4 Lead

Based on the monitoring period of record in the MWRR, all lead concentrations were near or below the analytical reporting limit during all sample periods [Figure 3-5]. There is no indication that lead concentrations are increasing in any monitoring wells [Figure 3-5].

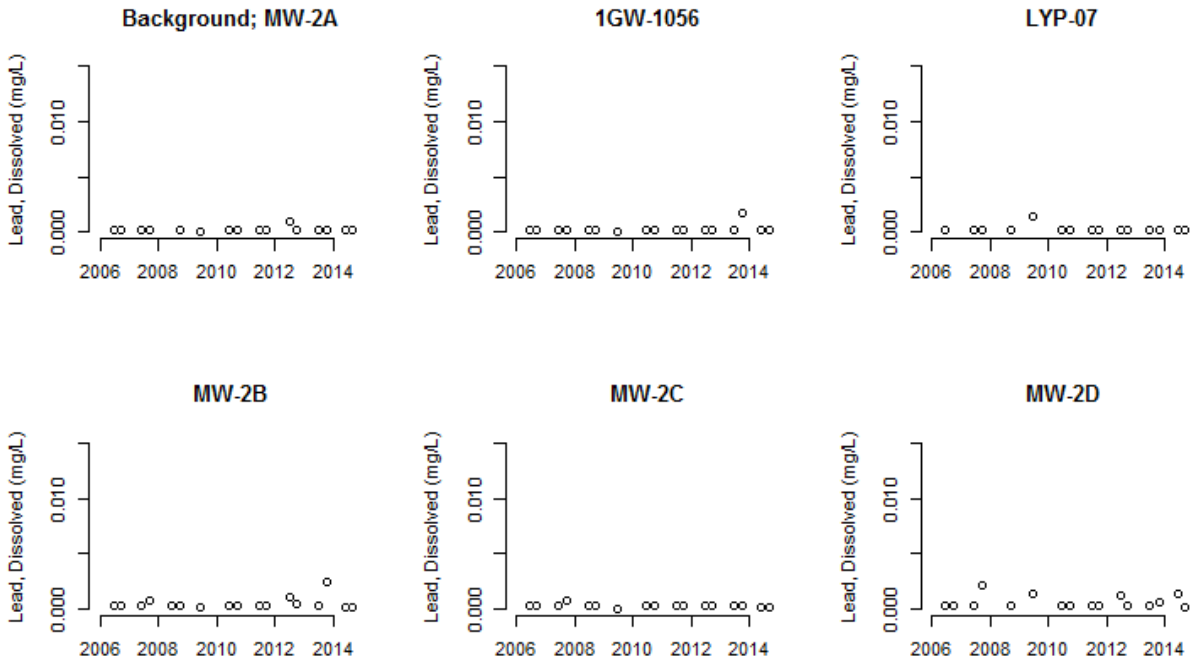

Figure 3-5. Lead concentrations in groundwater wells in the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2006-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.1.1.5 Mercury

Based on the monitoring period of record in the MWRR, all mercury concentrations were near or below the analytical reporting limit during all sample periods [Figure 3-6]. There is no indication that mercury concentrations are increasing in any monitoring wells [Figure 3-6].

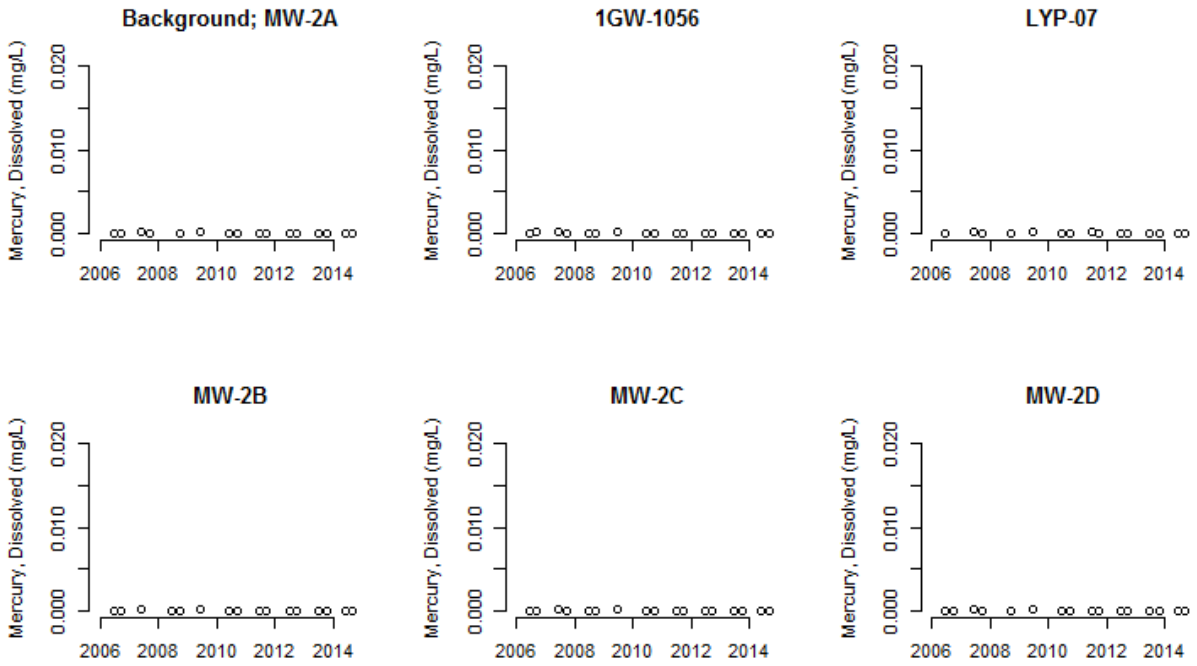

Figure 3-6. Mercury concentrations in groundwater wells in the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2006-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.1.1.6 Zinc

Based on the monitoring period of record in the MWRR, all zinc concentrations were near or below the analytical reporting limit during all sample periods [Figure 3-7]. There is no indication that zinc concentrations are increasing in any monitoring wells [Figure 3-7].

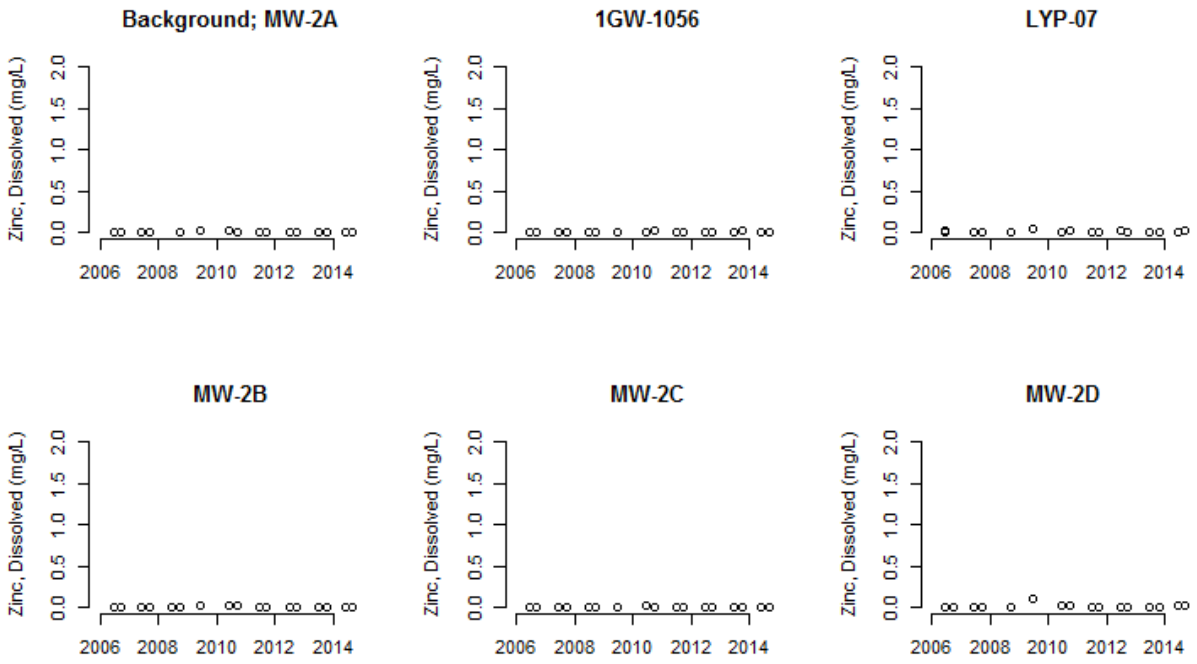

Figure 3-7. Zinc concentrations in groundwater wells in the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2006-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.1.2 Other Metals

In the MWRR in 2014, uranium concentrations exceeded the MDEQ [2012a] standard in the background well (MW-2A) and in three monitoring wells (1GW-1056, LYP-07, and MW-2D) in June and September of 2014 [Table 3-7]. Additionally, antimony concentration exceeded the MDEQ [2012a] standard in one monitoring well (LYP-07) in June 2014 [Table 3-7].

Table 3-7. Dissolved metal (non-contaminant of concern) concentrations (mg/L) in groundwater monitoring wells of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014[15].

Site	Al	Sb	Ba	Be	B	Cr	Co	Fe	Mn	Mb	Ni	Se	Ag	U	V
June															
MW-2A*	ND	ND	0.013	ND	ND	ND	ND	ND	ND	0.009	ND	0.010	ND	0.0457	ND
1GW-1056	0.027	ND	0.031	ND	ND	ND	ND	0.02	0.001	0.007	ND	0.004	ND	0.0461	ND
LYP-07	ND	0.0007	0.057	ND	ND	ND	ND	0.03	0.070	0.013	0.003	0.002	ND	0.0872	ND
MW-2B	0.101	ND	0.028	ND	ND	ND	ND	0.06	0.018	ND	ND	0.002	ND	0.0059	ND
MW-2C	ND	ND	0.018	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	0.0089	ND
MW-2D	0.513	ND	0.048	ND	ND	ND	ND	0.78	0.048	0.005	ND	0.004	ND	0.0481	ND
September															
MW-2A*	0.010	ND	0.013	ND	ND	ND	ND	ND	ND	0.008	ND	0.010	ND	0.0388	ND
1GW-1056	ND	ND	0.028	ND	ND	ND	ND	ND	ND	0.007	ND	0.004	ND	0.0346	ND
LYP-07	ND	0.0005	0.055	ND	ND	ND	ND	ND	0.060	0.010	0.004	0.002	ND	0.0579	ND
MW-2B	ND	ND	0.027	ND	ND	ND	ND	ND	0.004	ND	ND	0.002	ND	0.0049	ND
MW-2C	ND	ND	0.017	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	0.0084	ND
MW-2D	ND	ND	0.040	ND	ND	ND	ND	0.03	0.002	0.005	ND	0.003	ND	0.0502	ND

[15] Metal abbreviations: Al = aluminum, Sb = antimony, Ba = barium, Be = beryllium, B = boron, Cr = chromium, Co = cobalt, Fe = iron, Mn = manganese, Mb = molybdenum, Ni = nickel, Se = selenium, Ag = silver, U = uranium, and V = vanadium.

3.4.1.3 Common Ions

Common ion concentrations in the MWRR wells are presented in Table 3-8.

Table 3-8. Common ion concentrations (mg/L) in groundwater wells located of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014.

Site	Alkalinity	Bicarbonate Alkalinity	Calcium	Chloride	Hardness	Magnesium	Potassium	Sodium	Sulfate
June									
MW-2A*	120	150	86	4	270	13	3	26	220
1GW-1056	120	140	73	17	244	15	3	26	180
LYP-07	180	210	82	20	269	15	3	32	150
MW-2B	88	110	52	17	187	14	3	22	120
MW-2C	100	130	65	18	225	15	3	31	160
MW-2D	150	180	87	23	291	18	3	26	190
September									
MW-2A*	120	150	86	4	270	13	3	26	220
1GW-1056	120	140	73	17	244	15	3	26	180
LYP-07	180	220	82	23	269	15	3	32	150
MW-2B	94	110	56	21	199	14	3	23	120
MW-2C	110	130	67	20	229	15	3	31	170
MW-2D	150	190	87	24	291	18	3	26	190

3.4.2 Floodplain

3.4.2.1 Contaminants of Concern

In the Silver Bow Creek floodplain monitoring wells in 2014, five of six COCs had concentrations exceeding the most restrictive human health groundwater standard of MDHES [1994] or MDEQ [2012a] in at least one well [Table 3-9]. Five samples exceeded the arsenic standard but three of those were from background wells [Table 3-9]. Seven samples from five different well clusters exceeded the cadmium standard and all of those samples were from non-background wells [Table 3-9]. One sample from a monitoring well in the Stuart cluster exceeded the copper standard. One sample from the background well in the Crackerville cluster exceeded the cadmium standard [Table 3-9]. Seven samples (all from non-background wells) in four well clusters exceeded the zinc standard [Table 3-9].

Table 3-9. Dissolved metal (contaminant of concern) concentrations (mg/L) in groundwater monitoring wells located along Silver Bow Creek in the Streamside Tailings Operable Unit, September 2014.

Cluster	Well	Arsenic	Cadmium	Copper	Lead	Mercury	Zinc
Colorado Tailings	GW-1010R*	0.002	ND	0.001	ND	ND	ND
Colorado Tailings	GW-1052R	0.004	0.00282	0.220	0.0013	0.000007	1.830
Colorado Tailings	P-06A	0.002	0.00104	0.061	0.0019	0.000062	0.226
Rocker	GW-RK-BG*	0.007	0.00005	ND	ND	ND	ND
Rocker	MW-01	0.011	0.00104	0.079	0.0003	0.000007	0.146
Rocker	MW-10	ND	0.00342	0.297	0.0006	0.000006	3.830
Nissler	GW-1003*	0.010	ND	ND	ND	ND	ND
Nissler	1GW-1004A	ND	0.00773	0.127	0.0117	ND	9.970
Nissler	P-58A	0.003	0.00220	0.041	0.0004	0.000006	3.070
Silver Bow	P-114*	0.002	ND	0.002	ND	0.000088	0.010
Silver Bow	P-37A	0.003	0.00589	0.025	ND	0.000076	0.269
Silver Bow	P-39R	0.011	0.00022	0.043	ND	ND	0.022
Miles Crossing	GW-MC-BG*	0.033	ND	0.001	ND	ND	ND
Miles Crossing	GW-MC-NS	0.002	0.02470	0.301	ND	0.000009	7.790
Miles Crossing	GW-MC-SS	0.002	0.00619	0.043	ND	0.000019	3.810
Fairmont	GW-FM-BG*	0.002	0.00032	0.001	ND	0.000010	0.009
Fairmont	GW-FM-ES	0.002	0.00005	0.001	ND	0.000016	0.306
Fairmont	GW-FM-WS	0.002	0.00018	0.011	ND	0.000008	0.120
Crackerville	GW-CR-BG*	0.062	0.00044	0.036	0.0196	0.000028	0.357
Crackerville	GW-CR-ES	ND	0.00239	0.004	ND	0.000008	0.625
Crackerville	GW-CR-WS	0.006	0.06860	0.030	0.0030	0.000380	0.599
Stuart	GW-ST-BG*	0.002	0.00133	0.003	ND	ND	0.808
Stuart	GW-ST-ES	ND	0.01890	1.190	0.0003	0.000009	3.500
Stuart	GW-ST-WS	0.002	0.02220	0.116	ND	ND	3.870
Frontage Road	GW-FR-BG*	0.013	0.00015	0.005	ND	0.000010	0.037
Frontage Road	GW-FR-ES	0.002	0.00020	0.004	ND	0.000005	0.059
Frontage Road	GW-FR-WS	0.007	0.00012	0.005	ND	0.000021	0.032

ND Not detected at analytical reporting limit.

* Background well.

Exceeds most restrictive human health groundwater standard of MDHES [1994] or MDEQ [2012a].

3.4.2.1.1 Arsenic

Based on the monitoring period of record in the Silver Bow Creek floodplain, arsenic concentrations in all Subarea 1 floodplain monitoring wells were similar to the concentrations in the background well during all monitoring periods with the exception of one well (MW-01) which had one elevated sample in June 2014 [Figure 3-8]. In Subarea 2, arsenic concentrations have been slightly higher in one monitoring well of the Silver Bow cluster (P-37A) [Figure 3-9].

In the Miles Crossing cluster (Subarea 2), the background well (GW-MC-BG) has consistently had the highest concentrations of any well in the SSTOU monitoring network [Figure 3-2; Figure 3-8; Figure 3-9; Figure 3-10]. Subarea 4 monitoring wells all had arsenic concentrations which were similar to or lower than concentrations in the background wells [Figure 3-10].

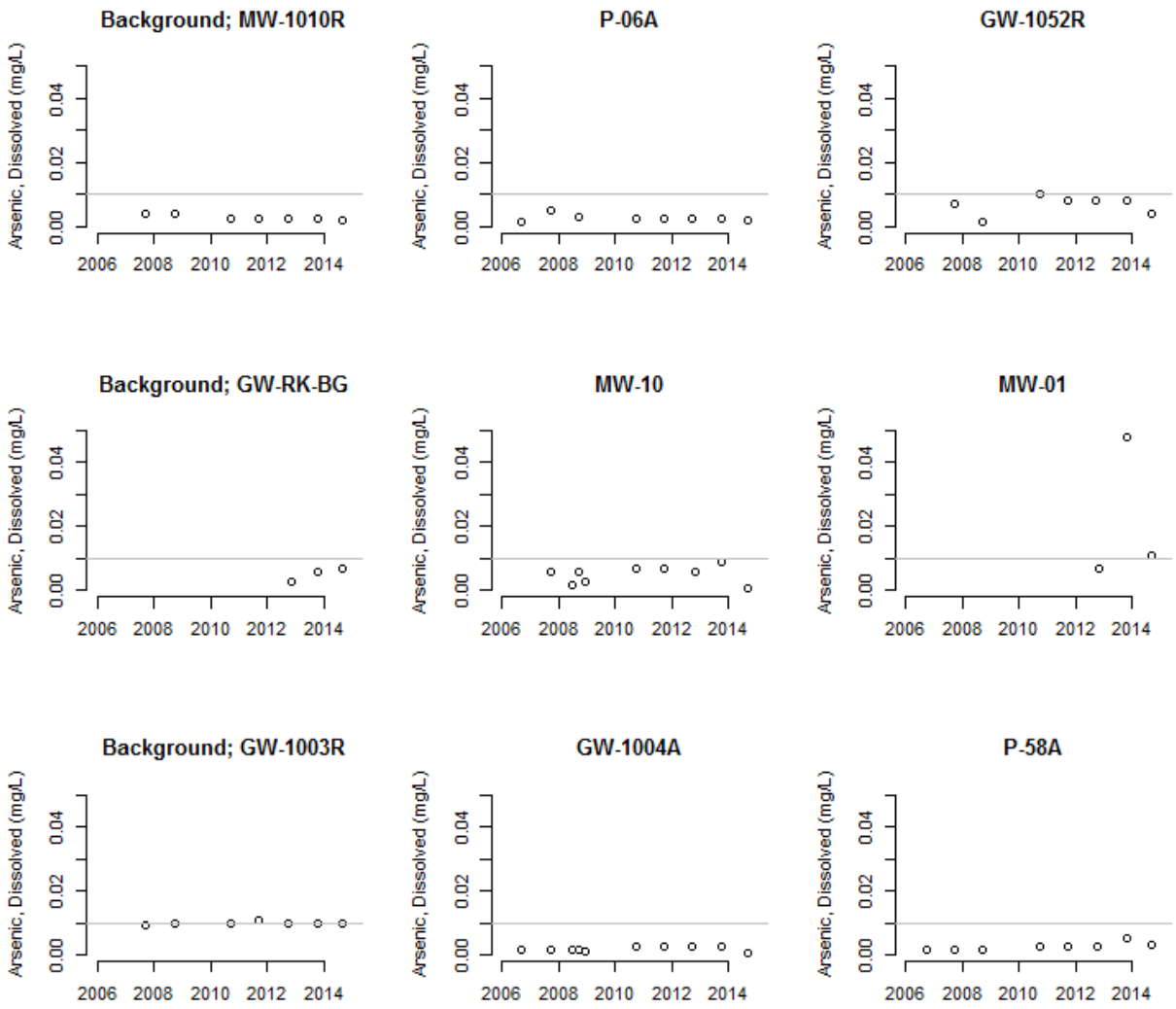

Figure 3-8. Arsenic concentrations in groundwater wells in Subarea 1 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Colorado Tailings cluster (upper row), Rocker cluster (middle row), and Nissler cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

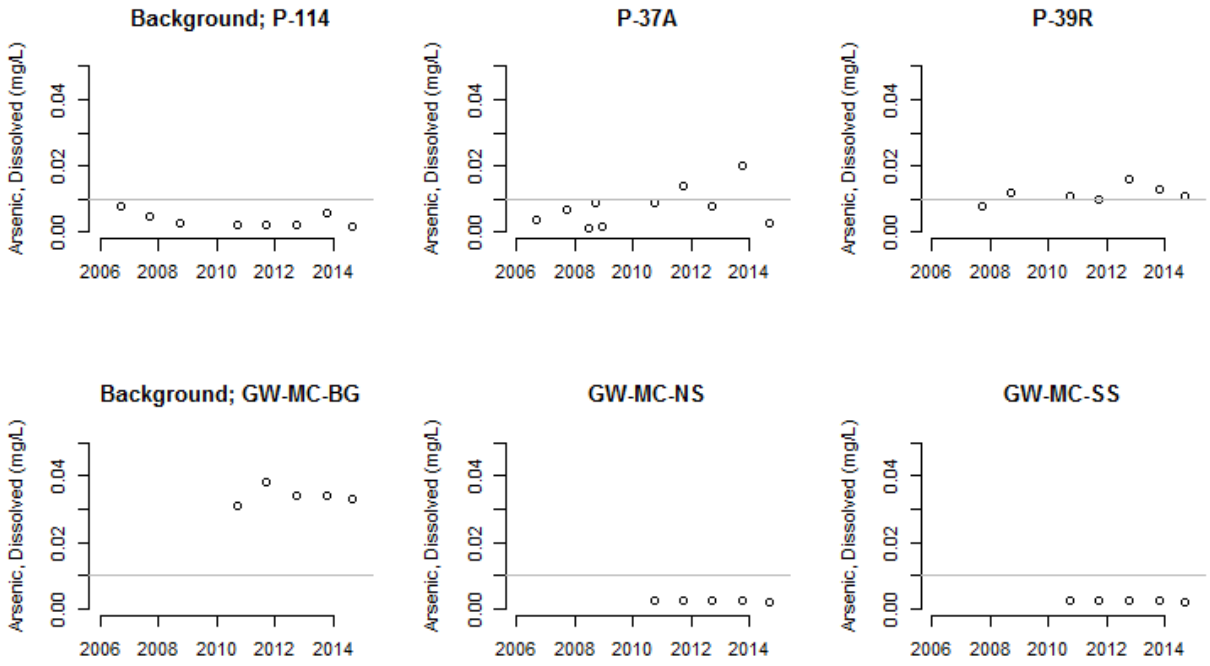

Figure 3-9. Arsenic concentrations in groundwater wells in Subarea 2 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Silver Bow cluster (upper row) and Miles Crossing cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

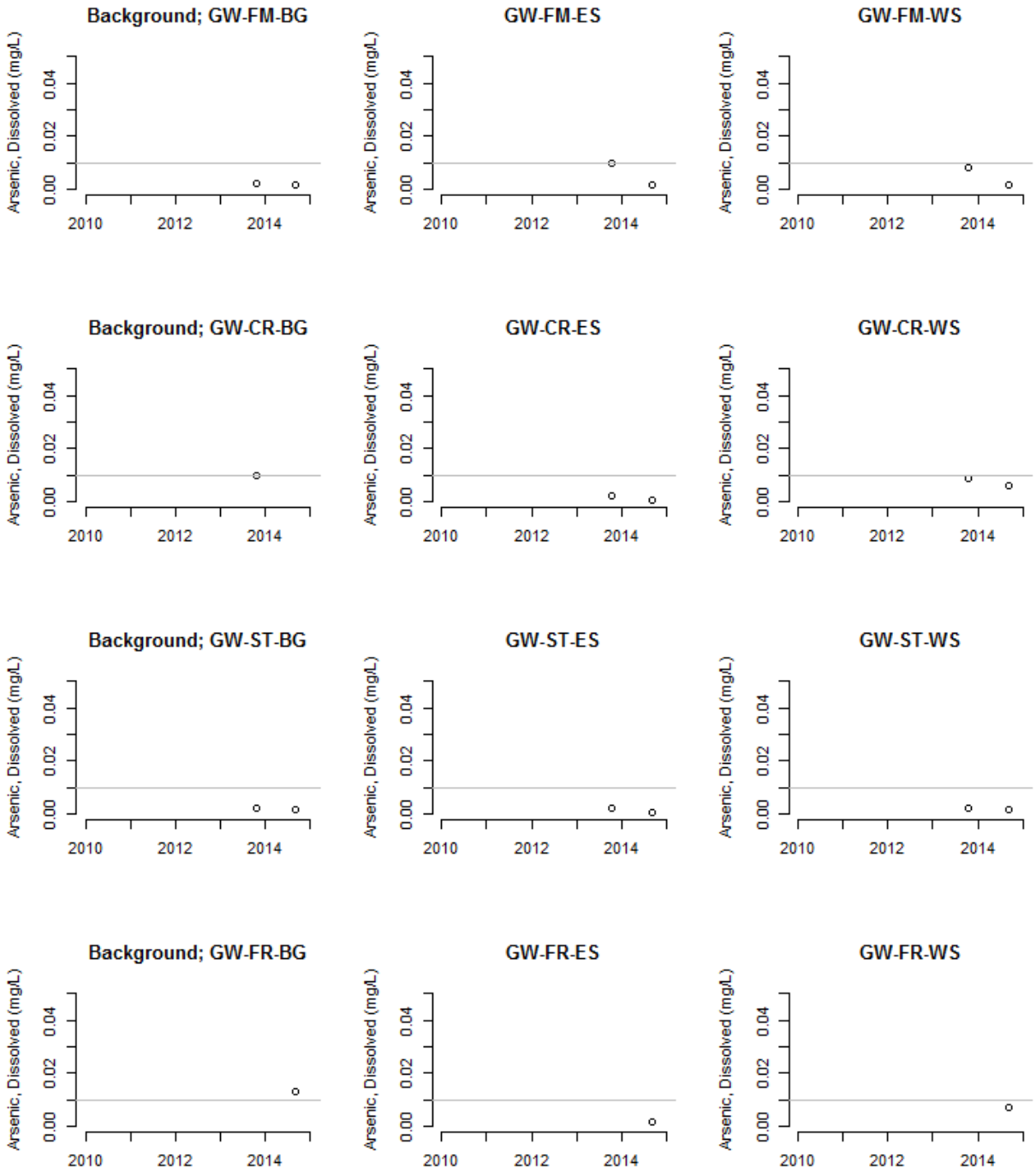

Figure 3-10. Arsenic concentrations in groundwater wells in Subarea 4 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Fairmont cluster (upper row), Crackerville cluster (upper middle row), Stuart cluster (lower middle row), and Frontage Road cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.2.1.2 Cadmium

Based on the monitoring period of record in the Silver Bow Creek floodplain, cadmium concentrations in all Subarea 1 floodplain monitoring wells were similar to the concentrations in the background well during all monitoring periods with the exception of one sample from monitoring well GW-1052R in 2009 [Figure 3-11]. In Subarea 2, cadmium concentrations have been elevated relative to the background well in two monitoring wells: P-37A (Silver Bow cluster) and GW-MC-NS (Miles Crossing cluster) [Figure 3-12]. In Subarea 4, two monitoring wells in the Stuart cluster and one monitoring well in the Crackerville cluster have had elevated concentrations relative to the background wells [Figure 3-13].

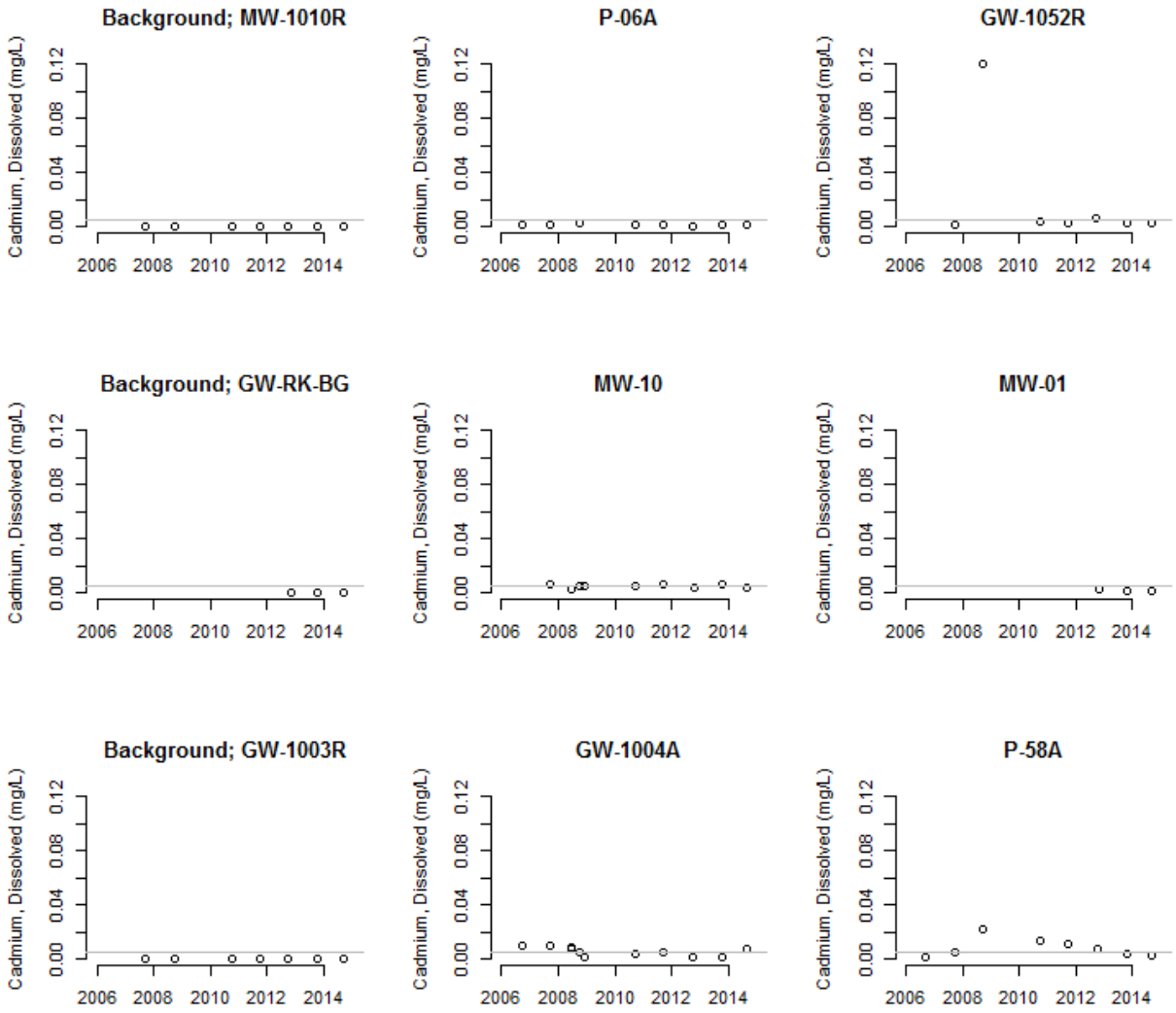

Figure 3-11. Cadmium concentrations in groundwater wells in Subarea 1 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Colorado Tailings cluster (upper row), Rocker cluster (middle row), and Nissler cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

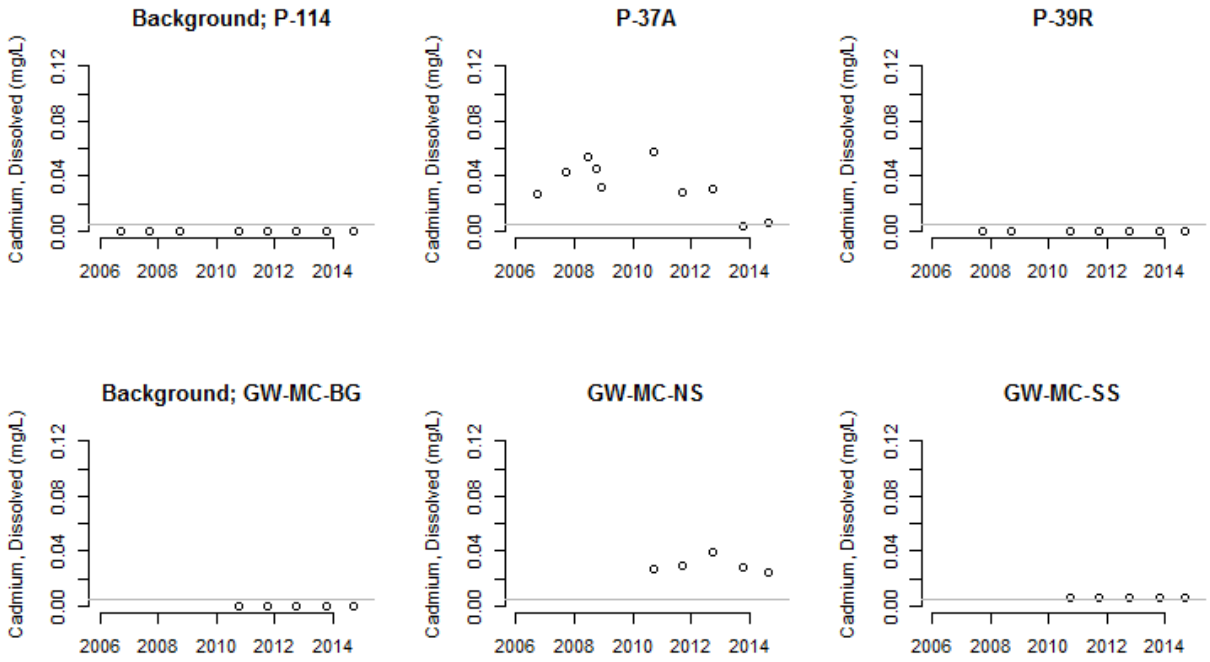

Figure 3-12. Cadmium concentrations in groundwater wells in Subarea 2 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Silver Bow cluster (upper row) and Miles Crossing cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

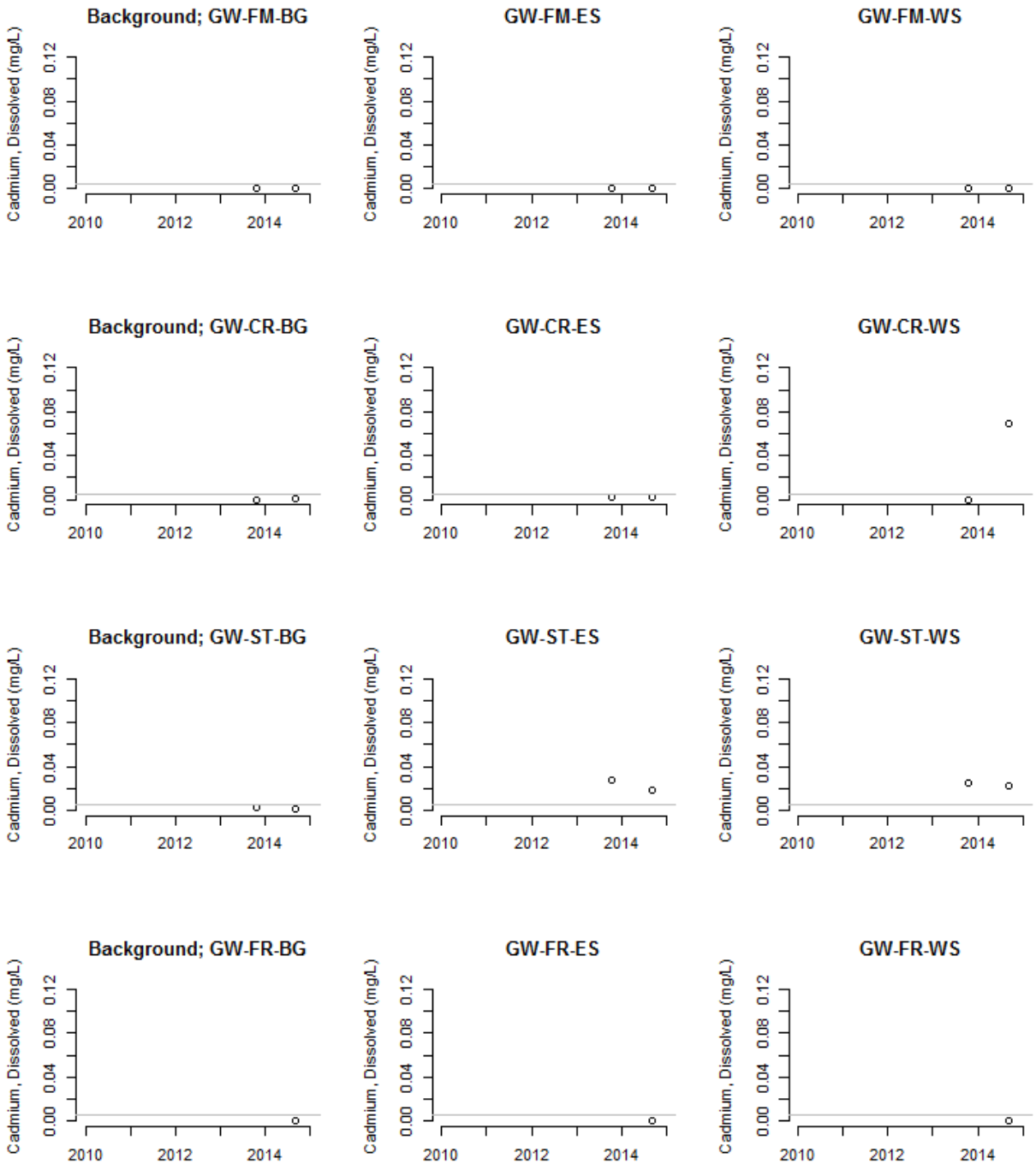

Figure 3-13. Cadmium concentrations in groundwater wells in Subarea 4 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Fairmont cluster (upper row), Crackerville cluster (upper middle row), Stuart cluster (lower middle row), and Frontage Road cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.2.1.3 Copper

Based on the monitoring period of record in the Silver Bow Creek floodplain, copper concentrations in the background wells were ≤0.068 mg/L in all (n = 37) samples and ≤0.006 mg/L in all but three of those samples [Figure 3-14; Figure 3-15; Figure 3-16]. Concentrations were higher in some of the monitoring wells but only exceeded the human health groundwater standard (1.0 mg/L; MDHES [1994]) in two wells; GW-MC-NS [Figure 3-15] and GW-ST-ES [Figure 3-16]. Copper concentrations were elevated relative to the background well concentration in at least one monitoring well of every cluster except the Silver Bow cluster in Subarea 1 [Figure 3-14] and the Fairmont, Crackerville, and Frontage Road clusters in Subarea 4 [Figure 3-16].

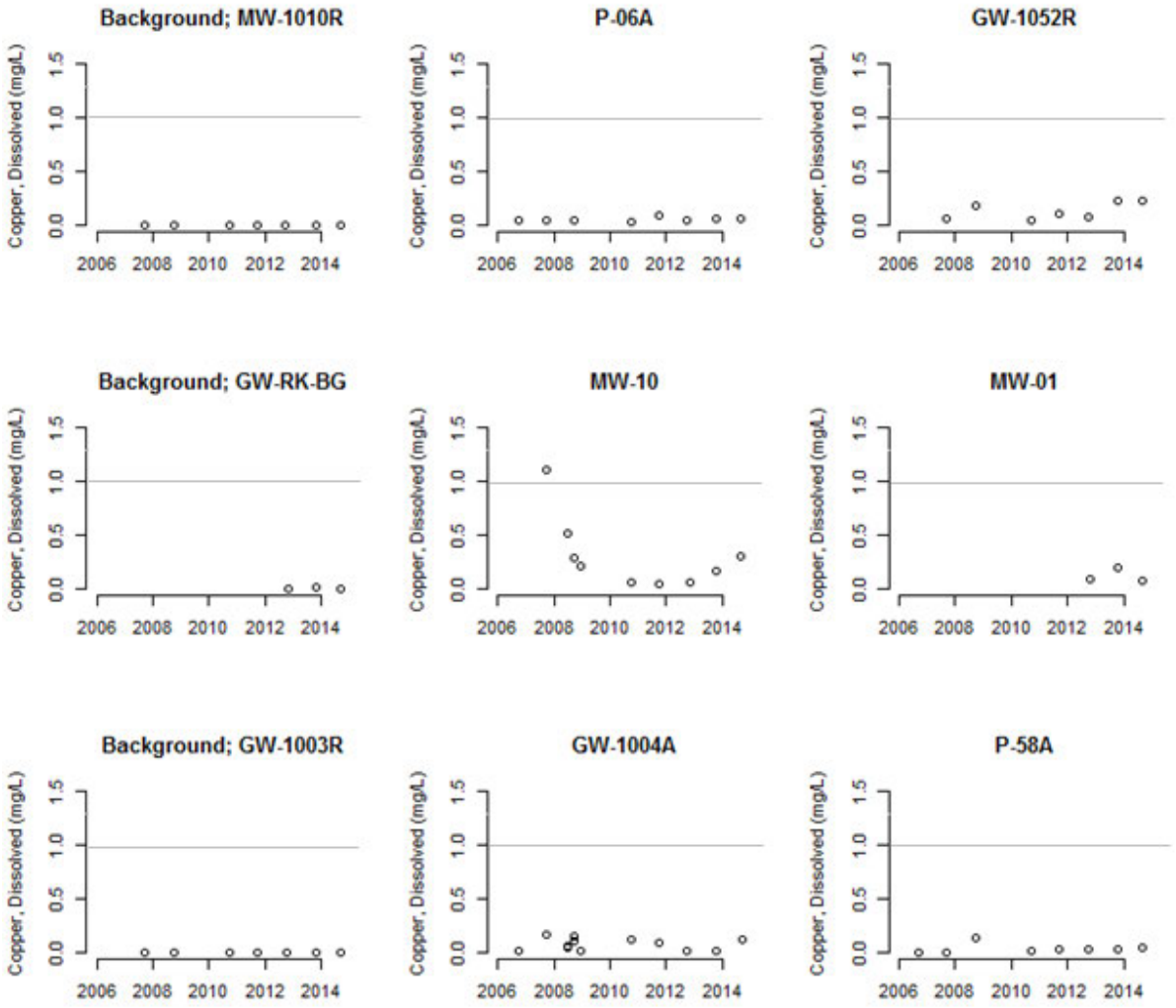

Figure 3-14. Copper concentrations in groundwater wells in Subarea 1 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDHES, 1994]. Each row of plots represents a well cluster: Colorado Tailings cluster (upper row), Rocker cluster (middle row), and Nissler cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

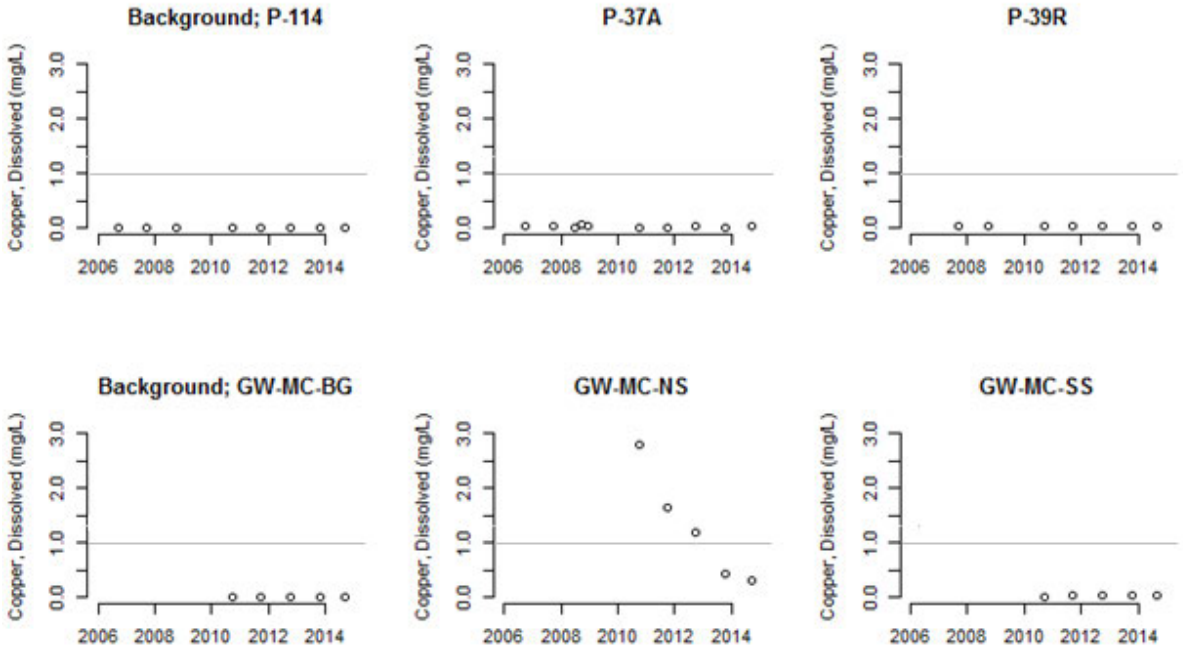

Figure 3-15. Copper concentrations in groundwater wells in Subarea 2 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDHES, 1994]. Each row of plots represents a well cluster: Silver Bow cluster (upper row) and Miles Crossing cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

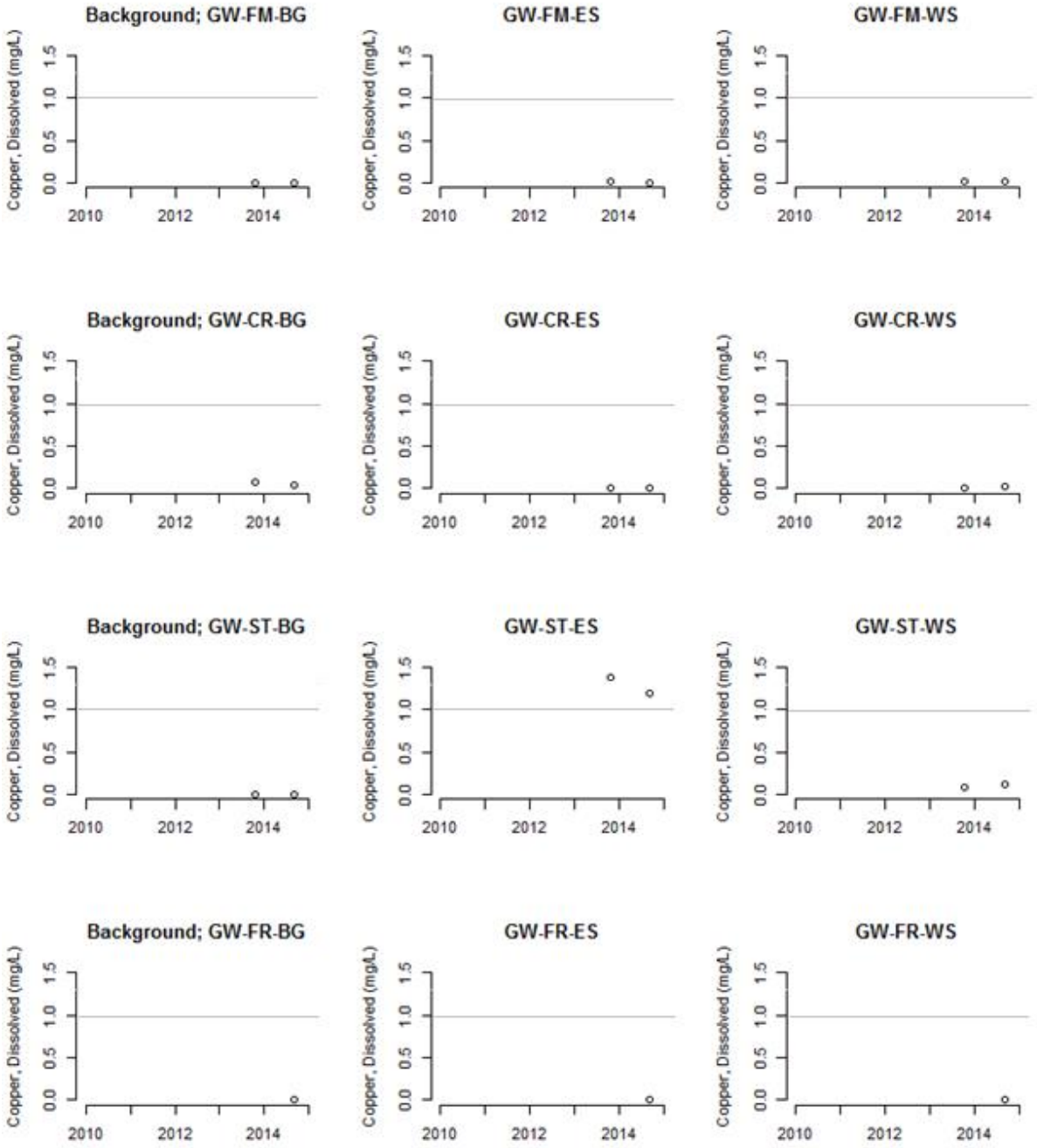

Figure 3-16. Copper concentrations in groundwater wells in Subarea 4 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDHES, 1994]. Each row of plots represents a well cluster: Fairmont cluster (upper row), Crackerville cluster (upper middle row), Stuart cluster (lower middle row), and Frontage Road cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.2.1.4 Lead

Based on the monitoring period of record in the Silver Bow Creek floodplain, lead concentrations in the background wells were below the analytical reporting limit in 31 of 37 samples and ≤0.0049 mg/L in 35 of 37 samples [Figure 3-17; Figure 3-18; Figure 3-19]. Two samples from the Crackerville background well were close to or above the human health groundwater standard [Figure 3-19]. Lead concentrations in one or both monitoring wells generally exceeded the concentration in the background well of the Colorado Tailings and Nissler clusters (Subarea 1) [Figure 3-17] and in the Fairmont cluster (Subarea 4) [Figure 3-19]. In the Crackerville cluster (Subarea 4) lead concentrations in the background well exceeded the concentration in both monitoring wells [Figure 3-19]. Excluding the Crackerville background well, no floodplain wells have exceeded the groundwater standard in the SSTOU in any cluster since 2009 [Figure 3-17; Figure 3-18; Figure 3-19].

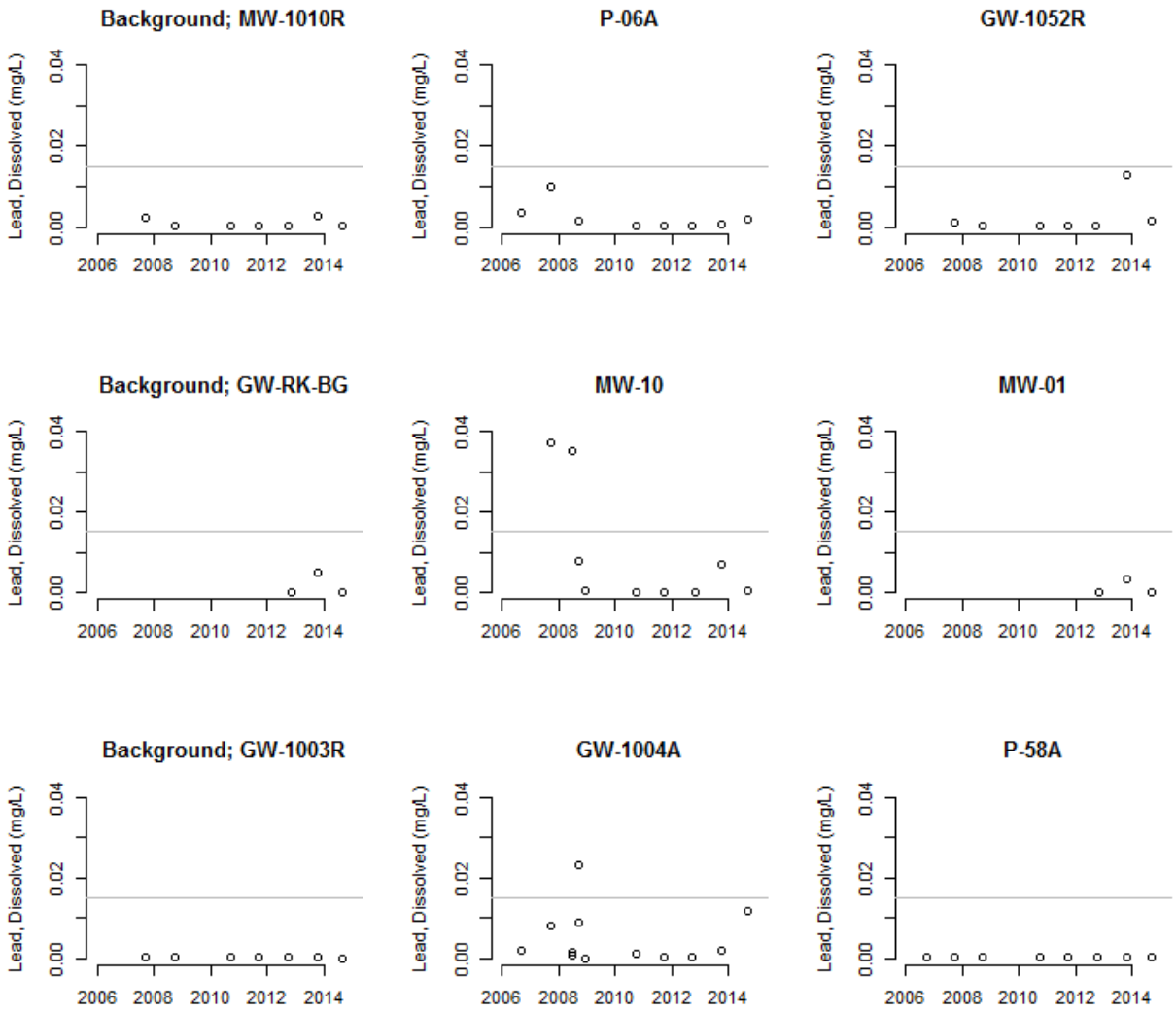

Figure 3-17. Lead concentrations in groundwater wells in Subarea 1 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Colorado Tailings cluster (upper row), Rocker cluster (middle row), and Nissler cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

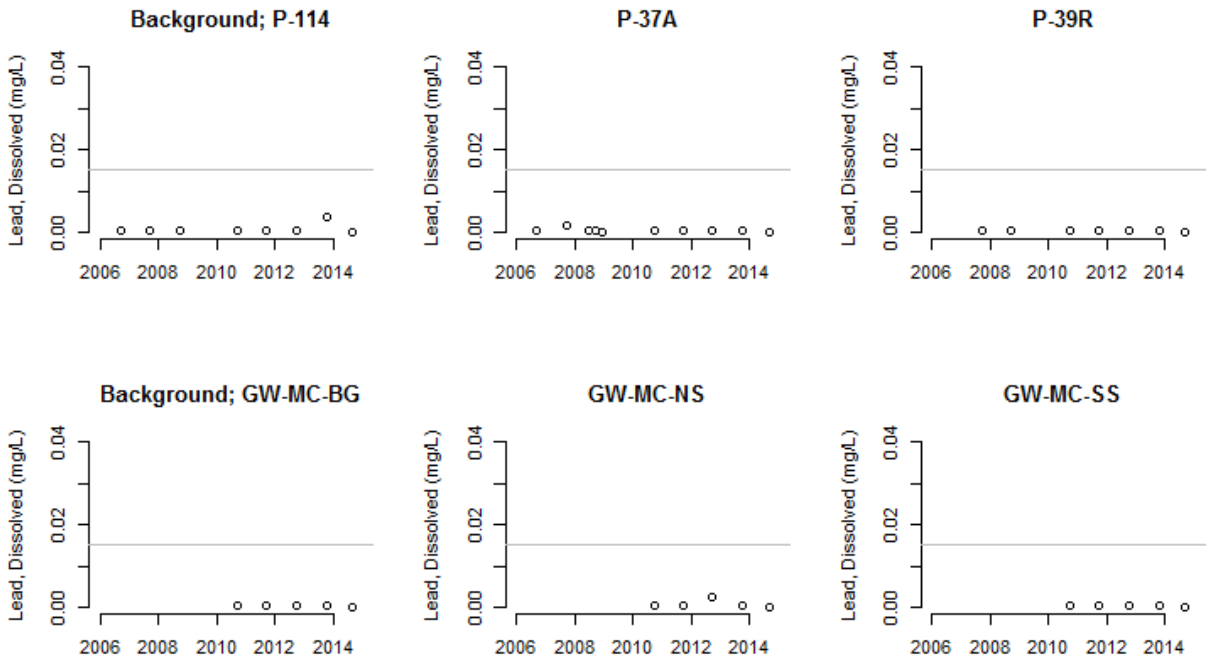

Figure 3-18. Lead concentrations in groundwater wells in Subarea 2 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Silver Bow cluster (upper row) and Miles Crossing cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

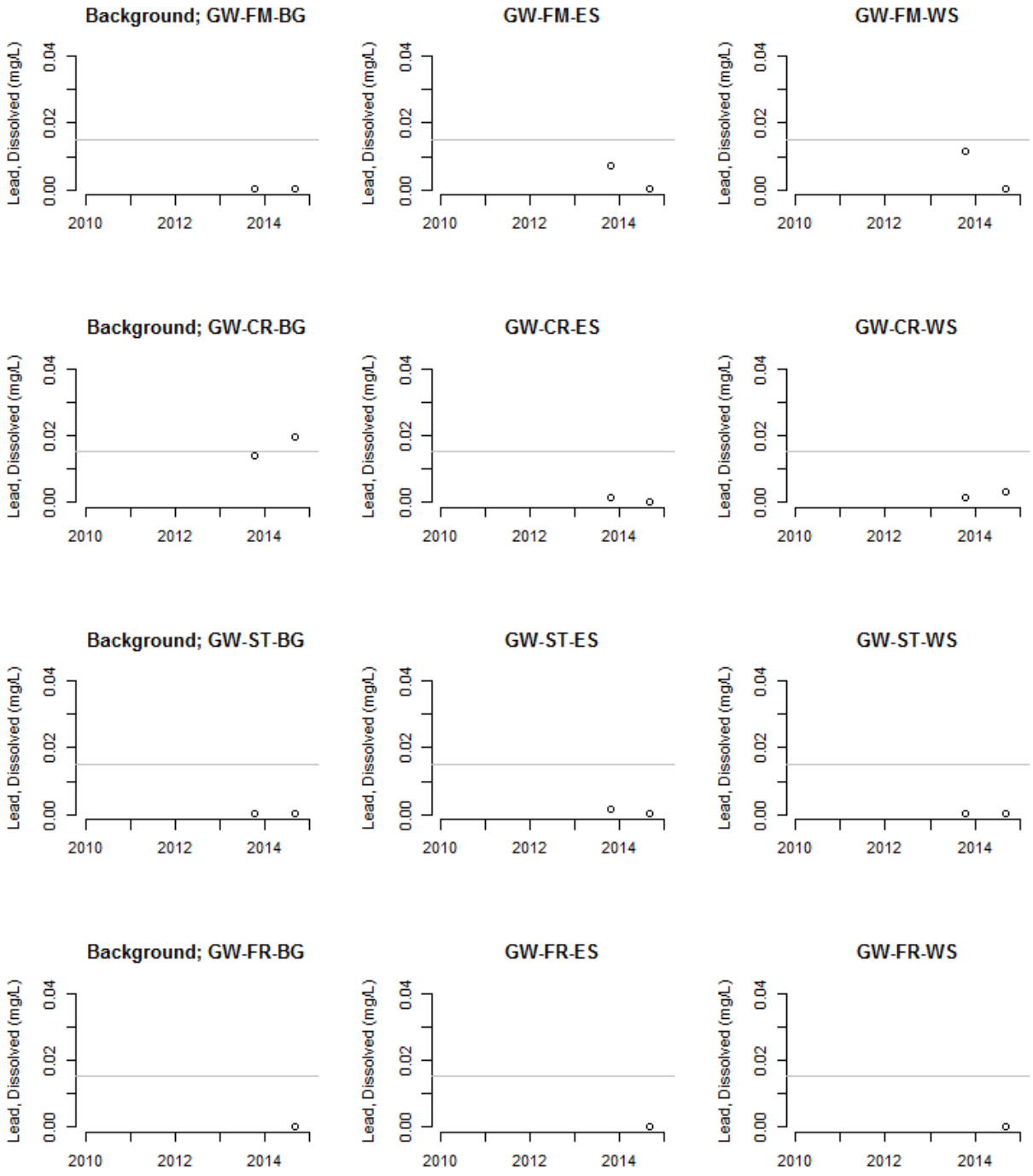

Figure 3-19. Lead concentrations in groundwater wells in Subarea 4 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Fairmont cluster (upper row), Crackerville cluster (upper middle row), Stuart cluster (lower middle row), and Frontage Road cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.2.1.5 Mercury

Based on the monitoring period of record in the Silver Bow Creek floodplain, mercury concentrations in the background wells have been similar to (or less than) the concentrations in the monitoring wells in all sample periods with the exception of one sample at GW-CR-WS in 2014 [Figure 3-20; Figure 3-21; Figure 3-22].

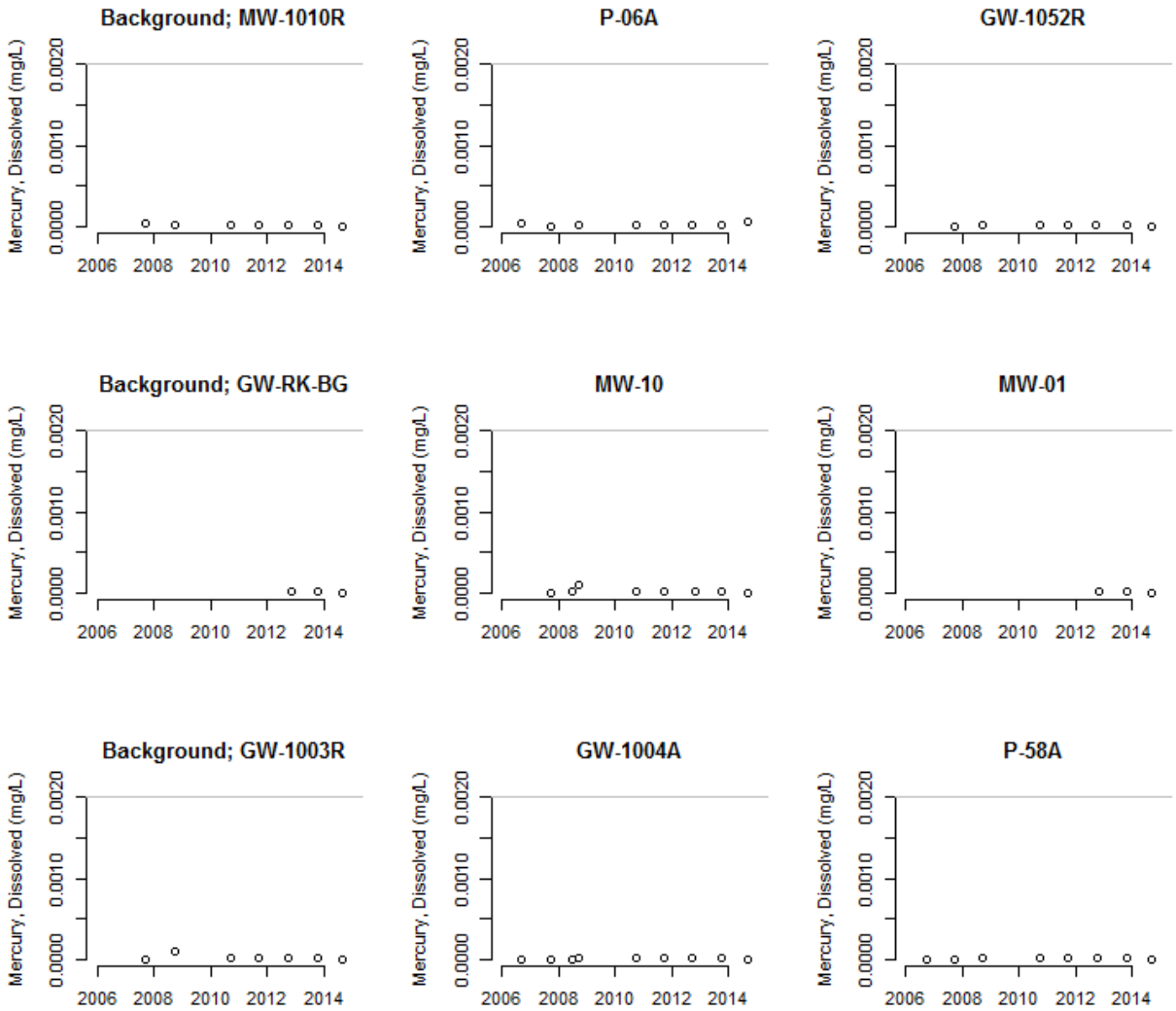

Figure 3-20. Mercury concentrations in groundwater wells in Subarea 1 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Colorado Tailings cluster (upper row), Rocker cluster (middle row), and Nissler cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

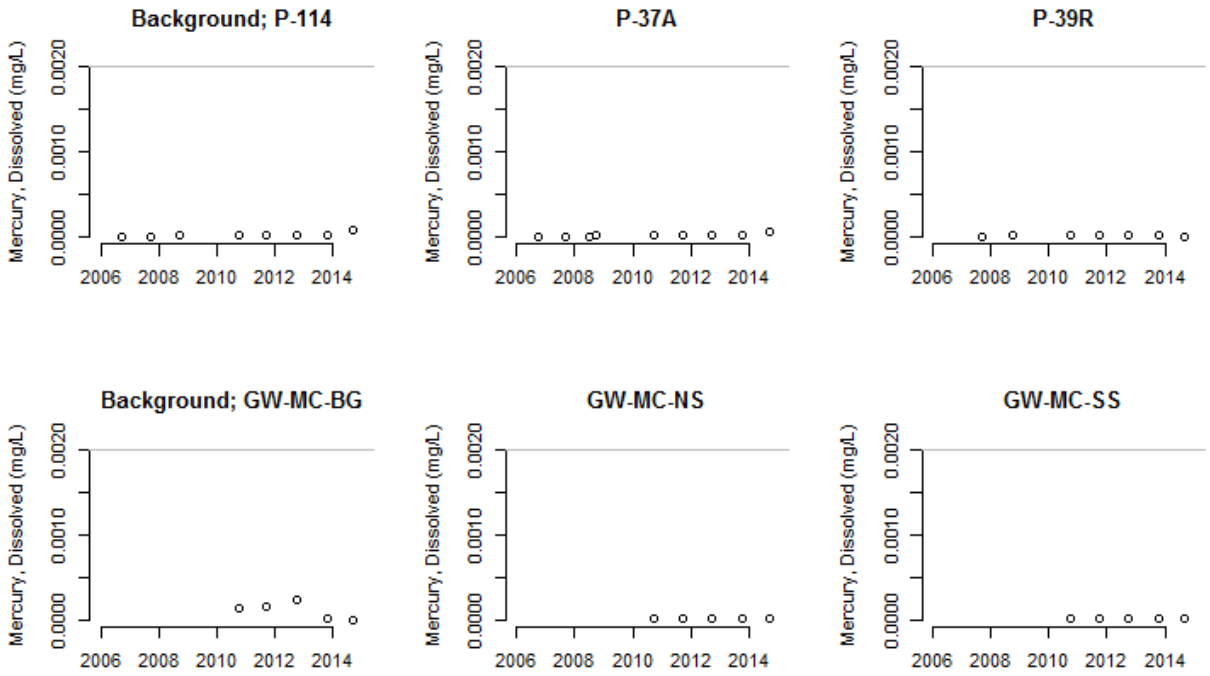

Figure 3-21. Mercury concentrations in groundwater wells in Subarea 2 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Silver Bow cluster (upper row) and Miles Crossing cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

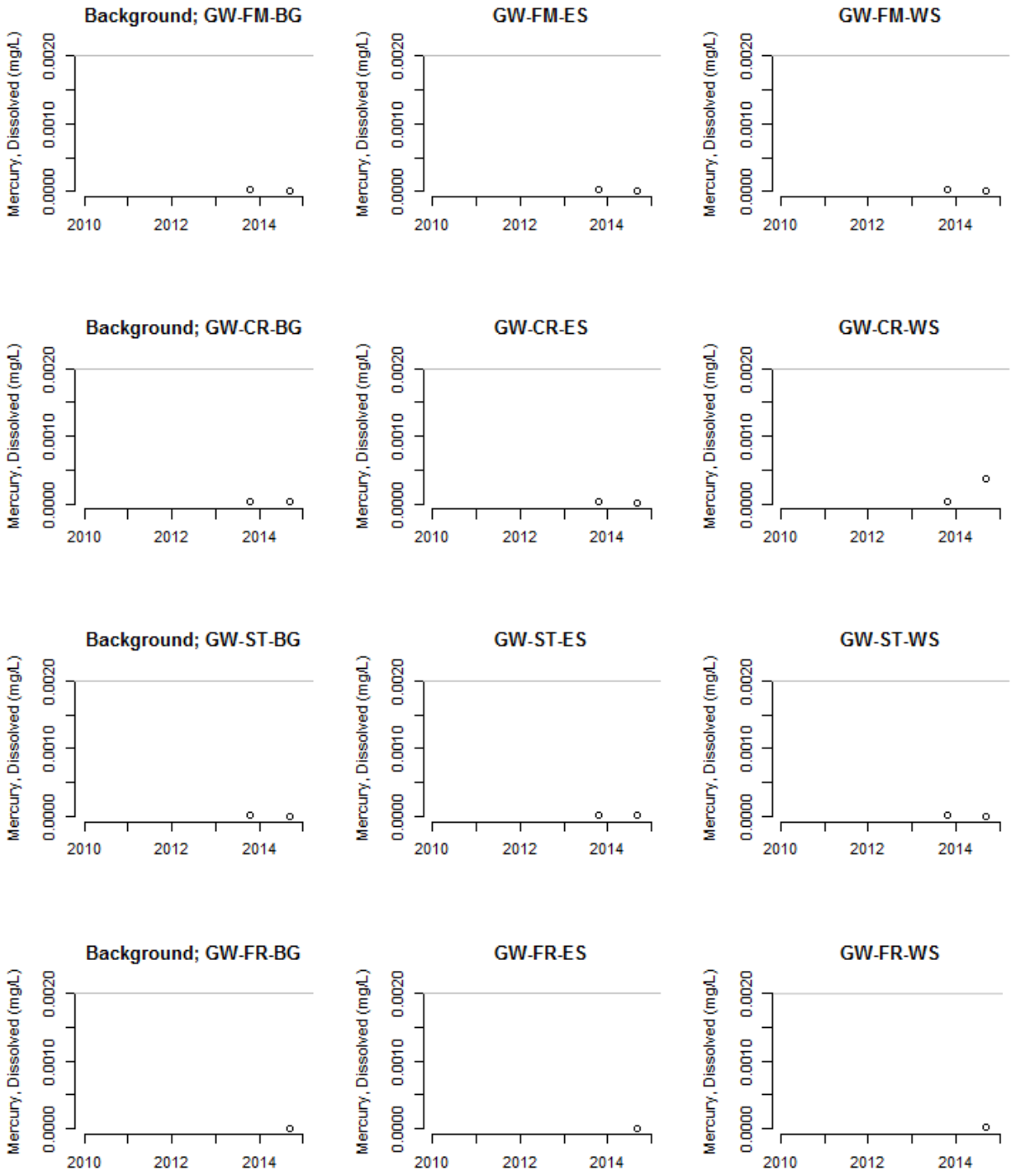

Figure 3-22. Mercury concentrations in groundwater wells in Subarea 4 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Fairmont cluster (upper row), Crackerville cluster (upper middle row), Stuart cluster (lower middle row), and Frontage Road cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.2.1.6 Zinc

Based on the monitoring period of record in the Silver Bow Creek floodplain, zinc concentrations in the background wells have ranged from <0.008-1.3 mg/L [Figure 3-23; Figure 3-24; Figure 3-25]. Zinc concentrations in one or both monitoring wells have exceeded the concentration in the background well in all Subarea 1 [Figure 3-23] and Subarea 2 [Figure 3-24] clusters and in the Stuart cluster of Subarea 4 [Figure 3-25]. Zinc concentrations commonly have exceeded the groundwater standard [MDEQ, 2012a] in particular monitoring wells including: GW-1052R (Colorado Tailings cluster), MW-10 (Rocker cluster), and GW-1004A and P-58A (Nissler cluster) in Subarea 1 [Figure 3-23]; GW-MC-NS and GW-MC-SS (Miles Crossing cluster) Subarea 2; and GW-ST-ES and GW-ST-WS (Stuart cluster) [Figure 3-25].

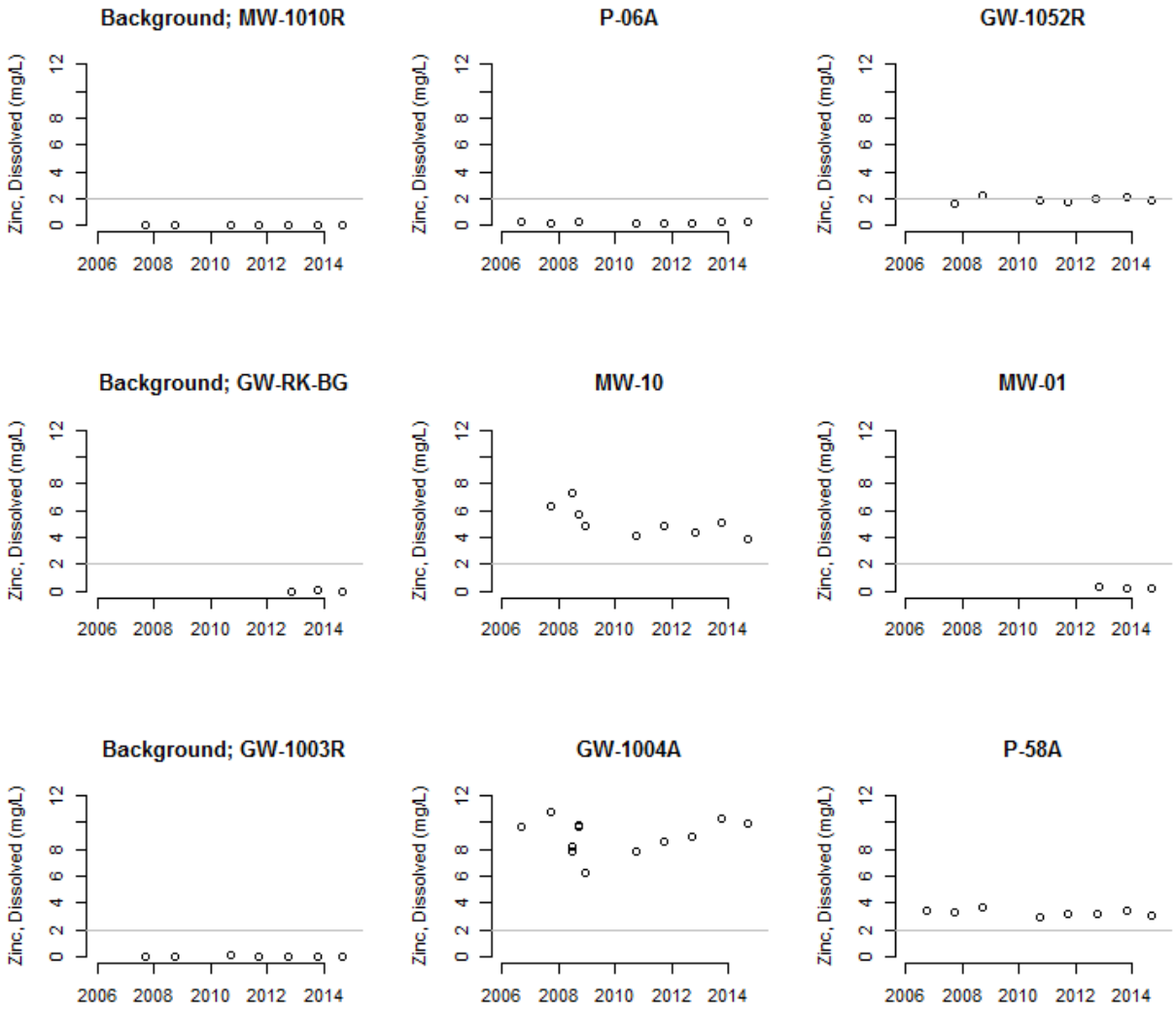

Figure 3-23. Zinc concentrations in groundwater wells in Subarea 1 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Colorado Tailings cluster (upper row), Rocker cluster (middle row), and Nissler cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

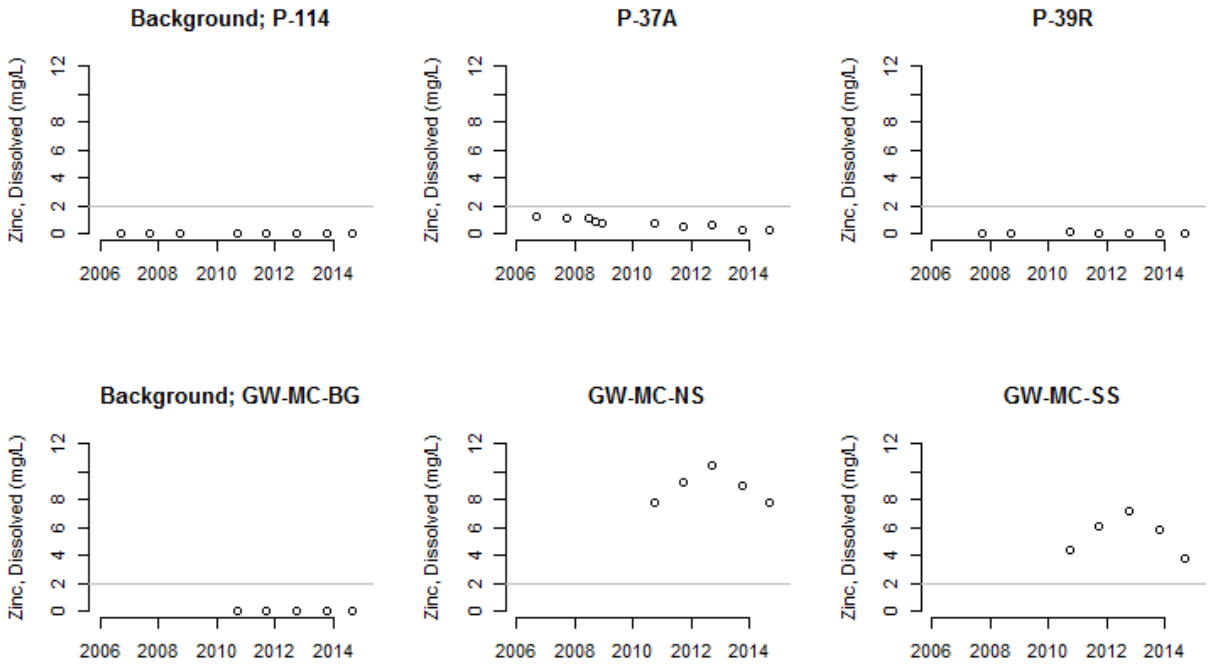

Figure 3-24. Zinc concentrations in groundwater wells in Subarea 2 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Silver Bow cluster (upper row) and Miles Crossing cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

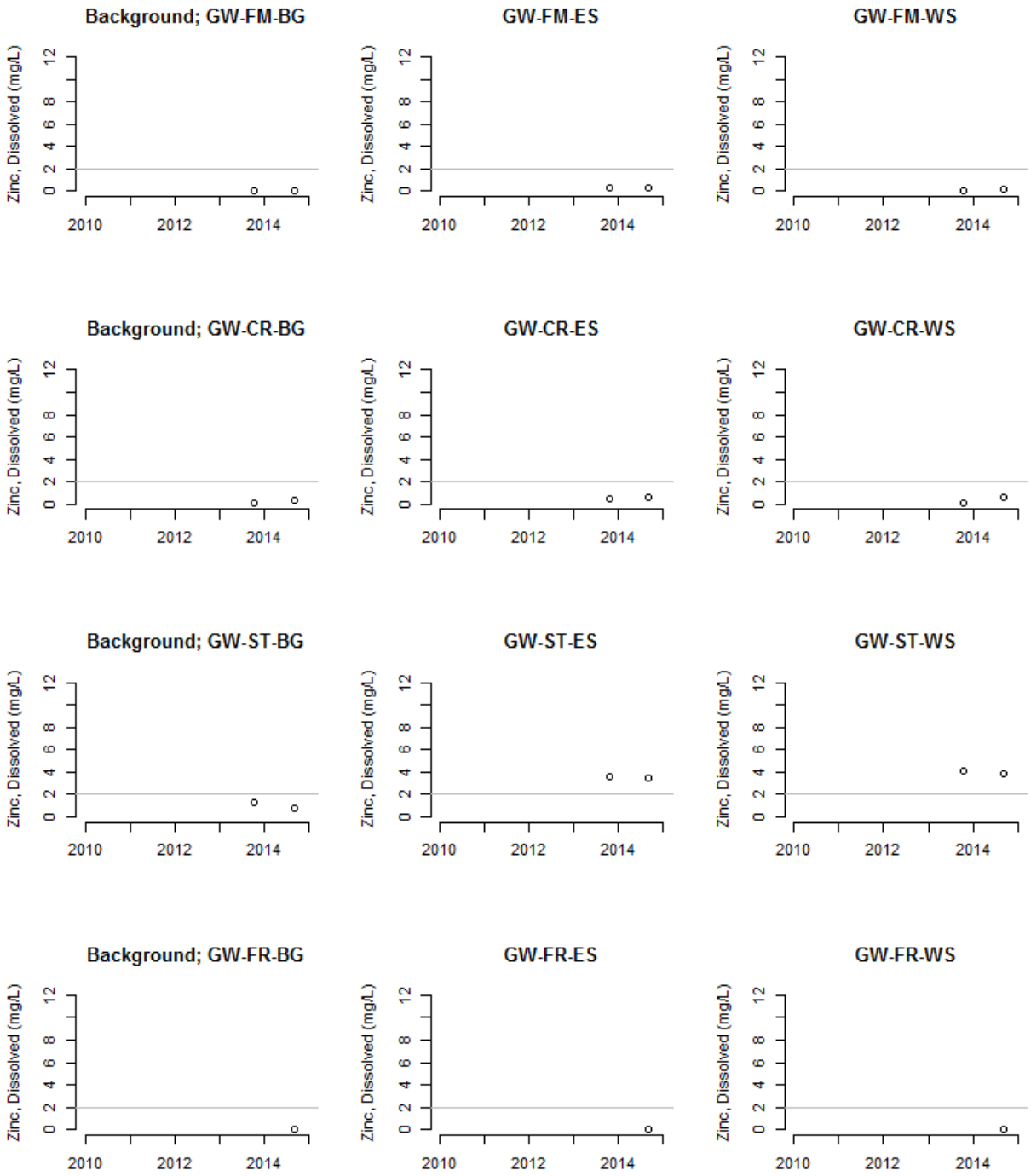

Figure 3-25. Zinc concentrations in groundwater wells in Subarea 4 of the Streamside Tailings Operable Unit, 2006-2014. Gray line represents the human health groundwater standard [MDEQ, 2012a]. Each row of plots represents a well cluster: Fairmont cluster (upper row), Crackerville cluster (upper middle row), Stuart cluster (lower middle row), and Frontage Road cluster (lower row) [Figure 3-1]. Samples below the analytical reporting limit (RL) are represented as half the RL.

3.4.2.2 Other Metals

Concentrations of non-COC metals in the Silver Bow Creek floodplain wells are displayed in Table 3-10. The sample from the Frontage Road background well (GW-FR-BG; Subarea 4) had an antimony concentration exceeding the MDEQ [2012a] groundwater standard [Table 3-10]. Four samples had uranium concentrations exceeding the MDEQ [2012a] groundwater standard including: the Colorado Tailings cluster (Subarea 1) background well (GW-1010R), one monitoring well (P-39R) of the Silver Bow cluster (Subarea 1), and both monitoring wells (GW GW-FR-ES and GW-FR-WS) of the Frontage Road cluster (Subarea 4) [Table 3-10].

Table 3-10. Dissolved metal (non-contaminant of concern) concentrations (mg/L) in groundwater monitoring wells located along Silver Bow Creek in the Streamside Tailings Operable Unit, September 2014[16].

Cluster	Site	Al	Sb	Ba	Be	B	Cr	Co	Fe	Mn	Mb	Ni	Se	Ag	U	V
Colorado Tailings	GW-1010R*	0.079	ND	0.024	ND	0.1	ND	ND	0.08	0.006	0.009	ND	ND	ND	0.0948	ND
Colorado Tailings	GW-1052R	0.070	ND	0.033	ND	0.1	ND	ND	0.13	3.410	0.022	0.002	ND	ND	0.0029	ND
Colorado Tailings	P-06A	0.080	ND	0.030	ND	ND	ND	ND	0.22	0.197	0.005	ND	ND	ND	0.0060	ND
Rocker	GW-RK-BG*	ND	ND	0.061	ND	ND	ND	ND	ND	ND	0.013	ND	ND	ND	0.0068	ND
Rocker	MW-01	0.094	ND	0.025	ND	0.1	ND	ND	0.20	0.612	0.003	ND	ND	ND	0.0066	ND
Rocker	MW-10	0.260	ND	0.079	ND	0.1	ND	0.02	0.02	4.920	ND	0.009	ND	ND	0.0008	ND
Nissler	GW-1003*	ND	ND	0.038	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	0.0026	ND
Nissler	1GW-1004A	1.270	ND	0.008	ND	0.1	ND	0.04	46.9	22.90	ND	0.023	ND	ND	0.0006	ND
Nissler	P-58A	0.299	ND	0.040	ND	ND	ND	0.02	10.3	7.360	ND	0.005	ND	ND	0.0005	ND
Silver Bow	P-114*	0.289	ND	0.019	ND	ND	ND	ND	0.11	0.004	0.006	ND	ND	ND	0.0026	ND
Silver Bow	P-37A	ND	ND	0.031	ND	ND	ND	ND	0.09	2.670	0.008	0.001	ND	ND	0.0059	ND
Silver Bow	P-39R	0.068	ND	0.136	ND	0.2	ND	ND	0.06	0.004	ND	0.002	0.002	ND	0.0330	ND
Miles Crossing	GW-MC-BG*	ND	ND	0.032	ND	ND	ND	ND	ND	0.003	0.045	ND	ND	ND	0.0025	ND
Miles Crossing	GW-MC-NS	0.253	ND	0.030	ND	ND	ND	0.01	0.19	4.660	0.006	0.014	ND	ND	0.0015	ND
Miles Crossing	GW-MC-SS	0.012	ND	0.106	ND	ND	ND	ND	0.02	5.680	0.031	0.015	ND	ND	0.0015	ND
Fairmont	GW-FM-BG*	0.029	ND	0.035	ND	ND	ND	ND	0.03	0.312	ND	0.005	ND	ND	0.0002	ND
Fairmont	GW-FM-ES	ND	ND	0.038	ND	ND	ND	ND	0.02	0.966	0.006	0.002	ND	ND	0.0015	ND
Fairmont	GW-FM-WS	0.017	0.0014	0.220	ND	ND	ND	ND	ND	1.480	0.014	0.003	ND	ND	0.0168	ND
Crackerville	GW-CR-BG*	10.60	0.0021	0.466	0.002	0.4	ND	ND	5.60	0.279	0.009	0.007	ND	0.0002	0.0038	ND
Crackerville	GW-CR-ES	0.030	ND	0.022	ND	ND	ND	ND	0.01	0.039	ND	0.003	ND	ND	0.0013	ND
Crackerville	GW-CR-WS	0.218	0.0015	0.270	ND	0.2	ND	ND	0.15	2.070	0.013	0.004	ND	ND	0.0041	ND
Stuart	GW-ST-BG*	0.307	ND	0.024	ND	ND	ND	ND	0.16	1.010	ND	0.025	ND	ND	ND	ND
Stuart	GW-ST-ES	0.170	ND	0.194	ND	ND	ND	ND	ND	1.260	ND	0.009	ND	ND	0.0004	ND
Stuart	GW-ST-WS	0.120	ND	0.024	ND	ND	ND	ND	ND	2.170	ND	0.013	ND	ND	0.0008	ND
Frontage Road	GW-FR-BG*	0.033	0.0111	0.143	ND	ND	ND	ND	0.04	0.224	0.010	0.002	0.002	ND	0.0151	ND
Frontage Road	GW-FR-ES	ND	0.0023	0.203	ND	ND	ND	ND	ND	0.320	0.034	0.002	ND	ND	0.1180	ND
Frontage Road	GW-FR-WS	ND	0.0058	0.168	ND	ND	ND	ND	ND	0.024	0.016	ND	ND	ND	0.0635	ND

ND Not detected at analytical reporting limit.
* Background well.
Exceeds human health groundwater standard [MDEQ, 2012a].

[16] Metal abbreviations: Al = aluminum, Sb = antimony, Ba = barium, Be = beryllium, B = boron, Cr = chromium, Co = cobalt, Fe = iron, Mn = manganese, Mb = molybdenum, Ni = nickel, Se = selenium, Ag = silver, U = uranium, and V = vanadium.

3.4.2.3 Common Ions

Common ion concentrations in floodplain monitoring wells are depicted in Table 3-11.

Table 3-11. Common ion concentrations (mg/L) in groundwater monitoring wells located along Silver Bow Creek in the Streamside Tailings Operable Unit, September 2014.

Cluster	Site	Alkalinity	Bicarbonate Alkalinity	Calcium	Chloride	Hardness	Magnesium	Potassium	Sodium	Sulfate
Colorado Tailings	GW-1010R*	290	350	118	24	386	22	6	144	430
Colorado Tailings	GW-1052R	130	160	83	18	265	14	8	98	330
Colorado Tailings	P-06A	130	150	65	73	217	13	5	78	180
Rocker	GW-RK-BG*	140	170	60	35	205	14	5	39	97
Rocker	MW-01	160	200	108	35	354	20	7	32	260
Rocker	MW-10	8	9	44	49	154	11	6	54	240
Nissler	GW-1003*	120	150	33	13	109	7	5	31	43
Nissler	1GW-1004A	ND	ND	95	54	468	56	8	53	750
Nissler	P-58A	40	48	50	31	163	9	7	26	190
Silver Bow	P-114*	200	240	55	30	160	6	4	97	110
Silver Bow	P-37A	180	220	105	93	342	19	7	62	200
Silver Bow	P-39R	310	370	169	140	542	29	13	91	260
Miles Crossing	GW-MC-BG*	270	330	34	75	118	8	5	219	250
Miles Crossing	GW-MC-NS	42	51	28	42	101	8	5	31	100
Miles Crossing	GW-MC-SS	96	120	40	43	148	12	6	34	91
Fairmont	GW-FM-BG*	40	48	34	23	114	7	5	23	99
Fairmont	GW-FM-ES	100	120	45	30	148	9	4	29	78
Fairmont	GW-FM-WS	140	170	53	23	178	11	5	25	58
Crackerville	GW-CR-BG*	95	120	20	18	66	4	7	103	110
Crackerville	GW-CR-ES	96	120	46	36	158	10	3	70	170
Crackerville	GW-CR-WS	110	140	41	29	130	7	5	36	64
Stuart	GW-ST-BG*	19	23	68	48	236	16	4	21	220
Stuart	GW-ST-ES	6	6	32	35	101	5	5	22	110
Stuart	GW-ST-WS	33	40	33	38	111	7	4	21	87
Frontage Road	GW-FR-BG*	880	1100	33	ND	112	7	2	9	16
Frontage Road	GW-FR-ES	660	800	125	30	410	24	4	19	280
Frontage Road	GW-FR-WS	490	600	46	1	151	9	3	12	32

ND Not detected at analytical reporting limit.

* Background well.

3.4.3 Data Validation

Four field blank samples were collected and each was analyzed for 30 analytes. All analyte concentrations were below the analytical reporting limit (0.008 mg/L) with the exception of one sample with dissolved zinc concentration of 0.010 mg/L.

Six field duplicate samples were collected in 2014 and each analyte concentration in those samples was compared to the analyte concentration in the paired field sample. The relative percent difference (RPD) between each analyte pair (30 analytes per sample) was calculated on a total of 180 sample pairs. Of those 180 pairs, 89 had concentrations in the field sample which were less than five times the reporting limit concentration. Of the other 91 pairs, eight had RPDs which were >25%. The RPDs in those eight samples ranged from 27-100% and included aluminum, barium, cadmium (two samples), copper, uranium (two samples), and zinc. Overall, the mean RPD of those samples with concentration at least five times greater than the reporting limit (n = 91) was 9% (standard deviation = 21%).

A completed quality assurance and quality control checklist, summary tables of field duplicate and field blank results, and assessments of data quality objectives are included in Appendix A. Results from the analytical laboratory are included in Appendix B. The 2014 groundwater monitoring data are included in Appendix E.

3.5 DISCUSSION

3.5.1 Mine Waste Relocation Repository

Monitoring in 2014 provided no evidence that COCs were leaching from the MWRR into nearby groundwater during wet (June) or dry periods (September). With the exception of arsenic, all COC concentrations in the monitoring wells were either below the analytical reporting limits or near the reporting limits. For arsenic, concentrations were consistently highest in the background monitoring well and these results are consistent with prior monitoring years. There does not appear to be any evidence that substantial increases in COC concentrations are occurring through time in any of the MWRR monitoring wells as would be expected if leaching of COC from the repository were occurring.

3.5.2 Floodplain

In the floodplain well clusters in 2014, several samples from monitoring wells had COC concentrations above the background well concentration, above the most restrictive MDHES [1994] or MDEQ [2012a] groundwater standard, or both. Arsenic concentrations were generally highest in the background wells, particularly in the Miles Crossing (Subarea 2) and Crackerville (Subarea 4) cluster. However, cadmium copper, and zinc concentrations in certain monitoring wells were commonly one to several orders of magnitude higher than the concentration in the background well. In addition, cadmium and zinc concentrations in monitoring wells were also frequently several times greater than the groundwater standard. These results indicate that portions of the shallow groundwater aquifer in the SSTOU remain contaminated by COC.

Uranium concentrations in groundwater wells also exceeded the MDEQ [2012a] groundwater standard in certain wells, some of which were background wells. Monitoring results in 2014 were generally similar to prior years, although at certain wells some COC concentrations have been variable through time.

3.5.3 Data Validation

Quality assurance and quality control results suggested that field procedures in 2014 resulted in relatively low level sample contamination. With one exception, all field blank analyte concentrations were below reporting limits suggesting that decontamination procedures were adequate. Eight (of 180) field duplicate analyte concentrations had RPDs exceeding 25%.

4.0 VADOSE ZONE WATER

4.1 INTRODUCTION

This chapter describes vadose zone water sampling data collected in 2014 to evaluate the effectiveness of the mine waste relocation repository (MWRR) at isolating the vadose zone from metal contaminants of concern (COC) in waste materials stored at the MWRR. If leaching of metal COCs from the MWRR occurs there is a potential for contamination of groundwater and surface water in the Streamside Tailings Operable Unit (SSTOU) of the Silver Bow Creek/Butte Area National Priorities List site.

The vadose zone is the area between the soil surface and the groundwater table. Water present in the vadose zone is soil moisture and has the ability to transport colloidal and dissolved nutrients, minerals, and contaminants through the soil column. Typically, constituent concentrations are higher in vadose zone water compared to groundwater. Therefore, existing groundwater standards are inapplicable to vadose zone water. In lieu of groundwater exceedance analysis, COC concentrations in vadose zone water at lysimeters down-gradient from the repository were evaluated and compared to concentrations in one background lysimeter.

Two questions are of primary interest in assessing potential leaching of COCs from the MWRR. First, are COC concentrations in monitoring lysimeters higher than concentrations in the background lysimeter? If so, contamination of the soil by COCs stored in the repository has potentially occurred. Second, are COC concentrations increasing through time in the monitoring lysimeters? If so, leaching of COCs from the repository is likely occurring.

4.2 PERFORMANCE GOALS

There are no specific numeric concentration cleanup goals for vadose zone water COC concentrations in the SSTOU Record of Decision (ROD) [MDEQ and USEPA, 1995]. The ROD specifies that metals and common ion concentrations are to be monitored in vadose zone water at each waste relocation repository to assess the mobility of contaminants from the repository sites to underlying groundwater or to the Silver Bow Creek floodplain down-gradient from any repositories. Only one waste repository (the MWRR) has been established in the SSTOU.

4.3 METHODS

The purpose of the vadose zone monitoring program is to collect data describing the temporal and spatial variation of metal and ion concentrations in vadose zone water near the MWRR in the SSTOU. These data provide a long-term record of vadose zone water COC and ion concentrations near the MWRR. These long-term data will be used to assess if leaching of COCs from the MWRR to groundwater and surface water in the SSTOU is occurring. A record of

changes to the vadose zone monitoring program is provided in the program monitoring plan [Naughton et al., 2014a]. The program attempts to fully adhere to monitoring requirements specified in the SSTOU ROD [Table 4-1].

Table 4-1. Minimum post-remedy monitoring requirements specified in the Record of Decision for the Streamside Tailings Operable Unit [MDEQ and USEPA, 1995].

Locations/Physical	Analytical Parameters	Analytes
In conjunction with groundwater sampling locations; three (3) per repository location	Metals (dissolved)	Arsenic, cadmium, copper, lead, mercury, zinc
	Common ions	Calcium, magnesium, sodium, potassium, chloride, sulfate
	Physical properties	Temperature, acidity (pH), oxidation-reduction potential, conductance

4.3.1 Monitoring Locations

Vadose zone water chemistry was monitored at eight lysimeters located in the vicinity of the MWRR in 2014 [Figure 4-1; Table 4-2]. The MWRR lysimeter cluster included a background monitoring lysimeter located up-gradient from the MWRR.

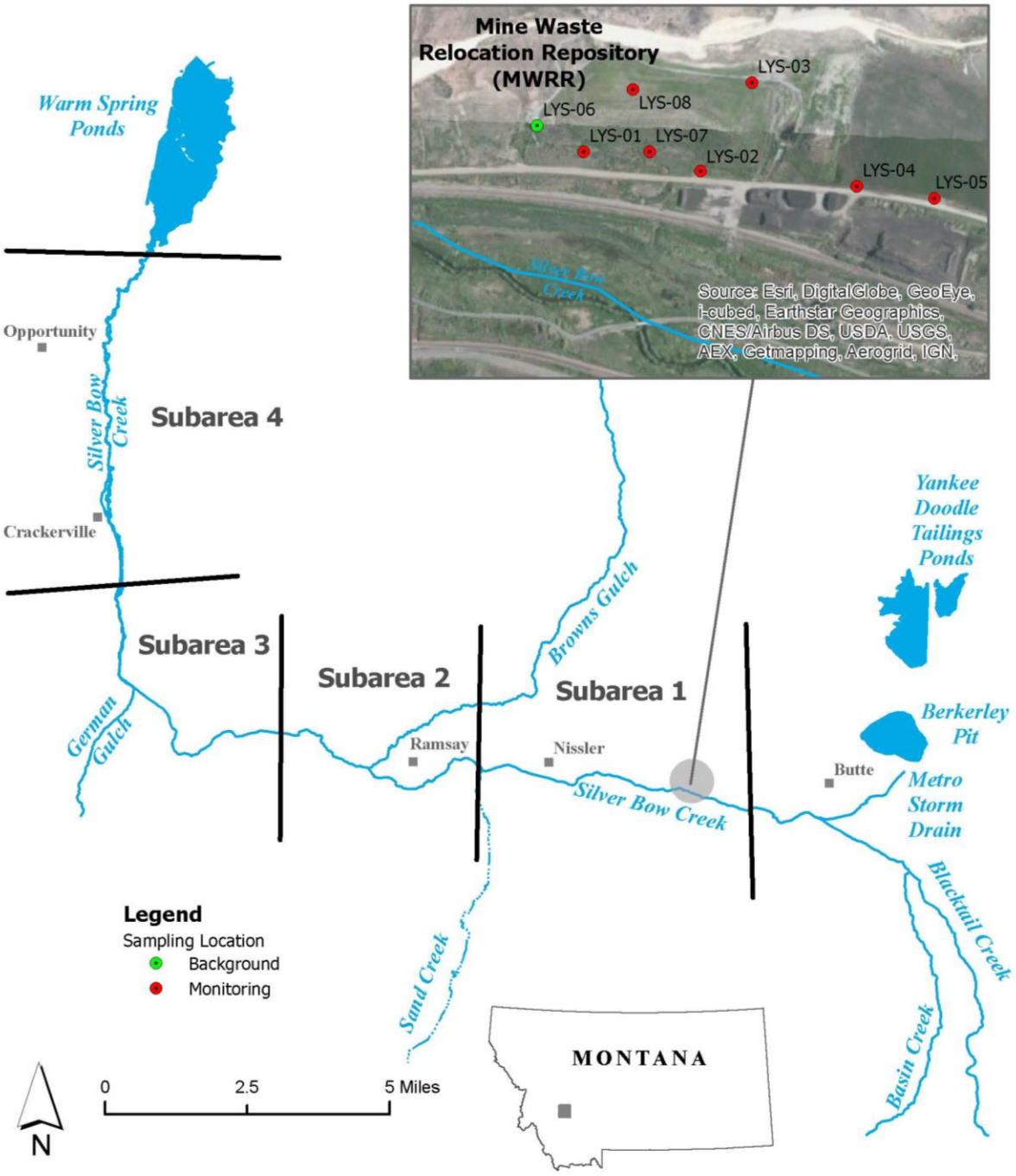

Figure 4-1. Sampling locations for vadose zone water monitoring in the Streamside Tailings Operable Unit, 2014.

Table 4-2. Lysimeter locations for vadose zone water monitoring of the Mine Waste Relocation Repository (MWRR) in the Streamside Tailings Operable Unit, 2014.

Lysimeter ID	Purpose	Location (GPS coordinates, NAD 83)	
		latitude	longitude
LYS-01	Monitoring	46.00261	-112.58599
LYS-02	Monitoring	46.00244	-112.58403
LYS-03	Monitoring	46.00349	-112.58323
LYS-04	Monitoring	46.00233	-112.58141
LYS-05	Monitoring	46.00223	-112.58011
LYS-06	Background	46.00289	-112.58679
LYS-07	Monitoring	46.00264	-112.58489
LYS-08	Monitoring	46.00336	-112.58521

4.3.2 Monitoring Schedule

In 2014, vadose zone water was monitored on June 4 and September 3. During both sample periods, vadose zone water was monitored at each lysimeter in the MWRR cluster. The June 4 sampling date was scheduled near the peak of the spring snowmelt hydrograph. The September 3 sampling date was scheduled to approximate base streamflow conditions

4.3.3 Monitoring Parameters

Vadose zone water samples were analyzed for the parameters and analytes listed in Table 4-3.

Table 4-3. Sampling parameters and analytes for vadose zone water monitoring in the vicinity of the Mine Waste Relocation Repository of the Streamside Tailings Operable Unit, 2014.

Parameter	Analytes
Concentrations of metal contaminants of concern (dissolved)	Arsenic, cadmium, copper, lead, mercury, zinc
Concentrations of other metals (dissolved)	Aluminum, antimony, barium, beryllium, boron, cobalt, chromium, iron, manganese, molybdenum, nickel, selenium, uranium, vanadium
Common ion concentrations (total)	Sulfate, total alkalinity, bicarbonate alkalinity, calcium, magnesium, sodium, potassium, chloride
Other physical properties	Total suspended sediment (TSS) concentration, hardness, water temperature, pH, specific conductivity, dissolved oxygen (DO), turbidity

4.3.4 Sample Collection and Analysis Procedures

Sample collection, analysis, and quality assurance procedures are described in the project sampling and analysis plan [Naughton et al., 2014a]. Methods generally followed standard operating procedures (SOPs) developed for the Clark Fork River [AR, 1992]. Field sampling procedures were in accordance with MDEQ [2012b] and followed "clean hands/dirty hands" procedures as described in USGS [2006]. Dedicated, or disposable, well bailers were used in low yield wells where installation of a submersible pump was impractical.

Due to low sample volume in the lysimeters, some deviations from the standard operating procedures previously described occurred. First, sample bottles were not triple rinsed with each sample prior to collection. Second, samples were not field filtered but were instead lab filtered. Third, when sample volume was very limited, dissolved metals were prioritized over common ions for laboratory analysis. Finally, field parameters (water temperature, pH, dissolved oxygen concentration, and conductivity) were not measured.

Calibration methods for field meters, data recording and handling methods, and quality assurance and quality control procedures are described in the project sampling and analysis plan [Naughton et al., 2014b]. Samples were analyzed by Energy Laboratories (Helena, Montana). Laboratory analysis procedures for each analyte are presented in Table 4-4.

Table 4-4. Analytes, methods, and reporting limits for groundwater sampling in the Streamside Tailings Operable Unit, 2014.

Analyte	Requested Method	Requested Reporting Limit (mg/L)[17]	Holding Time (days)	Bottle	Preservative
Water Samples - Physical Properties and Inorganics					
Alkalinity, Total (as CaCO3)	A 2320 B	4	14		
Alkalinity, Bicarbonate (as HCO3)	A 2320 B	4	14		
Chloride	EPA 300.0	1	7		
Sulfate	EPA 300.0	1	7		
Hardness (as CaCO3)	A 2340 B	1	180		
Water Samples - Dissolved Metals (0.45 µm filtered)					
Aluminum	EPA 200.7	0.009	180	250 mL HDPE	HNO3 to pH <2
Antimony	EPA 200.8	0.0005			
Arsenic	EPA 200.8	0.001			
Barium	EPA 200.8	0.003			
Beryllium	EPA 200.8	0.0008			
Boron	EPA 200.7	0.1			
Cadmium	EPA 200.8	0.00003			
Calcium	EPA 200.7	1			
Chromium	EPA 200.8	0.01			
Cobalt	EPA 200.8	0.01			
Copper	EPA 200.8	0.001			
Iron	EPA 200.7	0.02			
Lead	EPA 200.8	0.0003			
Magnesium	EPA 200.8	1			
Manganese	EPA 200.8	0.001			
Mercury	EPA 245.1	0.000005			
Molybdenum	EPA 200.8	0.005			
Nickel	EPA 200.8	0.002			
Potassium	EPA 200.7	1			
Selenium	EPA 200.8	0.001			
Silver	EPA 200.8	0.0002			
Sodium	EPA 200.7	1			
Uranium	EPA 200.8	0.0002			
Vanadium	EPA 200.8	0.1			
Zinc	EPA 200.8	0.008			

4.3.5 Data Analysis

Dissolved metal and common ion concentrations from 2014 are presented in tabular form for each sampling event. All metal COC concentrations through the monitoring period at each lysimeter are also plotted through time to evaluate temporal trends. Finally, for each COC, differences in concentrations in the background lysimeter and each monitoring lysimeter were compared with paired *t*-tests. Only data from the last five-year period (2010-2014) were included in these comparisons and only from those lysimeters which have produced sufficient sample volumes for every sample period from 2010-2014 [DeArment et al., 2011c; 2013b;

[17] Requested reporting limits are either the required reporting limit of MDEQ [2012a] or the lowest reporting limit previously provided by the analytical laboratory, whichever is lower.

Naughton et al., 2013b; 2015b]. Samples with analyte concentrations below the reporting limit were assumed to be half the reporting limit for these tests.

4.3.6 Data Validation

Data quality objectives (DQOs) were established in the SSTOU monitoring project sampling and analysis plan (SAP) for "data representativeness", "comparability", "completeness", "sensitivity", "precision", "bias", and "accuracy" [Naughton et al., 2014b]. Methods for field and laboratory quality assurance and quality control (QA/QC) procedures are described in detail in the project SAP. A completed QA/QC checklist, summary tables of field duplicate and field blank results, and assessments of data quality objectives are included in Appendix A.

4.4 RESULTS

Dissolved metal COC concentrations in MWRR lysimeters in 2014 are presented in Table 4-5. Concentrations of dissolved metals which are not COCs in MWRR lysimeters in 2014 are presented in Table 4-6. Common ion concentrations in MWRR lysimeters in 2014 are presented in Table 4-7.

In June 2014, sample volumes were sufficient for analysis of dissolved metals in all lysimeters [Table 4-5; Table 4-6] but sample volumes were insufficient to analyze common ions in five lysimeters: LYS-03, LYS-04, LYS-05, LYS-07, and LYS-08 [Table 4-7]. In September 2014, sample volumes were sufficient for analysis of dissolved metals in all lysimeters except LYS-08 [Table 4-5; Table 4-6]. Sample volumes were sufficient for all common ions only in LYS-06 and LYS-02 in September 2014, in the other lysimeters some common ions were analyzed in September [Table 4-7].

Table 4-5. Dissolved metal (contaminant of concern) concentrations (mg/L) in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014.

Site	Arsenic	Cadmium	Copper	Lead	Mercury	Zinc
June						
LYS-06*	0.002	ND	0.006	ND	0.000006	0.014
LYS-01	0.003	ND	ND	ND	ND	ND
LYS-02	0.031	0.00006	0.009	ND	0.000007	ND
LYS-03	0.071	ND	0.002	ND	ND	0.033
LYS-04	0.079	0.00004	0.006	ND	ND	0.009
LYS-05	0.018	0.00015	0.011	ND	0.000008	0.013
LYS-07	0.006	0.00008	0.006	ND	ND	0.045
LYS-08	0.005	ND	0.001	ND	ND	ND
September						
LYS-06*	0.003	ND	0.012	ND	ND	0.023
LYS-01	0.003	ND	0.001	ND	ND	0.011
LYS-02	0.032	0.00006	0.010	ND	0.000007	0.014
LYS-03	0.083	ND	0.002	ND	0.000005	0.010
LYS-04	0.070	0.00004	0.008	ND	ND	0.010
LYS-05	0.018	0.00017	0.011	ND	ND	0.012
LYS-07	0.006	0.00004	0.004	ND	ND	0.009
LYS-08	DNA	DNA	DNA	DNA	DNA	DNA

* Background lysimeter.

DNA Not sampled due to insufficient sample volume.

ND Not detected at analytical reporting limit.

Table 4-6. Dissolved metal (non-contaminants of concern) concentrations (mg/L) in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014[18].

Site	Al	Sb	Ba	Be	B	Cr	Co	Fe	Mn	Mb	Ni	Se	Ag	U	V
June															
LYS-06*	ND	ND	0.009	ND	0.2	ND	ND	ND	0.004	0.007	ND	0.005	ND	0.0005	ND
LYS-01	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	0.0706	ND
LYS-02	ND	0.0007	0.011	ND	0.6	ND	ND	ND	ND	0.054	ND	0.014	ND	0.7920	ND
LYS-03	ND	0.0010	0.039	ND	0.1	ND	ND	ND	0.001	0.022	ND	ND	ND	0.0018	ND
LYS-04	ND	0.0013	0.056	ND	ND	ND	ND	ND	ND	0.005	ND	0.003	ND	0.0247	ND
LYS-05	ND	0.0016	0.015	ND	2.0	ND	ND	ND	0.001	0.029	ND	0.010	ND	1.8900	ND
LYS-07	ND	0.0014	0.007	ND	0.2	ND	ND	ND	0.003	0.123	ND	0.003	ND	0.1540	ND
LYS-08	ND	ND	0.03	ND	0.1	ND	ND	ND	0.005	0.008	ND	0.012	ND	0.1230	ND
September															
LYS-06*	ND	ND	0.01	ND	0.3	ND	ND	ND	0.007	0.011	0.001	0.004	ND	0.0066	ND
LYS-01	ND	ND	0.039	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	0.1090	ND
LYS-02	ND	0.0007	0.015	ND	0.7	ND	ND	ND	ND	0.060	ND	0.028	ND	1.0800	ND
LYS-03	ND	0.0007	0.037	ND	0.2	ND	ND	ND	ND	0.022	ND	ND	ND	0.0017	ND
LYS-04	ND	0.0015	0.057	ND	0.1	ND	ND	ND	ND	ND	ND	0.003	ND	0.0223	ND
LYS-05	ND	0.0013	0.014	ND	2.1	ND	ND	ND	0.002	0.026	ND	0.009	ND	1.6700	ND
LYS-07	ND	ND	0.006	ND	0.2	ND	ND	ND	ND	0.110	ND	0.003	ND	0.1990	ND
LYS-08	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA

* Background lysimeter.

DNA Not sampled due to insufficient sample volume.

ND Not detected at analytical reporting limit.

[18] Metal abbreviations: Al = aluminum, Sb = antimony, Ba = barium, Be = beryllium, B = boron, Cr = chromium, Co = cobalt, Fe = iron, Mn = manganese, Mb = molybdenum, Ni = nickel, Se = selenium, Ag = silver, U = uranium, and V = vanadium.

Table 4-7. Common ion concentrations (mg/L) in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014.

Site	Alkalinity	Bicarbonate Alkalinity	Calcium	Chloride	Hardness	Magnesium	Potassium	Sodium	Sulfate
June									
LYS-06*	45	54	344	28	1,090	57	ND	241	1,600
LYS-01	140	170	87	24	294	19	3	32	220
LYS-02	560	680	370	36	1,720	193	3	2,380	8,300
LYS-03	DNA	DNA	43	DNA	145	9	4	49	DNA
LYS-04	DNA	DNA	98	DNA	384	34	12	150	DNA
LYS-05	DNA	DNA	460	DNA	1,720	139	22	1,150	DNA
LYS-07	DNA	DNA	265	DNA	939	67	10	745	DNA
LYS-08	DNA	DNA	171	DNA	799	90	6	116	DNA
September									
LYS-06*	73	88	258	61	850	50	ND	229	1,300
LYS-01	DNA	DNA	101	27	341	21	3	38	230
LYS-02	750	910	447	96	2,160	254	3	2,940	8,800
LYS-03	DNA	DNA	42	4	139	8	3	47	100
LYS-04	DNA	DNA	103	4	398	34	13	148	450
LYS-05	DNA	DNA	447	5	1,660	132	21	1,070	4,500
LYS-07	DNA	DNA	316	DNA	1,120	80	10	832	DNA
LYS-08	DNA	DNA	171	DNA	799	90	6	116	DNA

* Background lysimeter.

DNA Not sampled due to insufficient sample volume.

ND Not detected at analytical reporting limit.

4.4.1 Arsenic

In 2014, arsenic concentrations in each MWRR lysimeter was similar to prior years [Figure 4-2]. It appears possible that arsenic concentrations in LYS-03 and LYS-04 may be increasing over time at a modest rate, however this apparent trend is likely the result of random variation given the limited number of samples [Figure 4-2]. Based on the paired *t*-test results, there was evidence (*p*-values were ≤0.0019) that mean arsenic concentrations in lysimeters LYS-02, LYS-04, LYS-05, and LYS-07 were higher than in the background lysimeter [Table 4-8]. LYS-04 had mean concentration 0.067 mg/L higher than in the background lysimeter [Table 4-8].

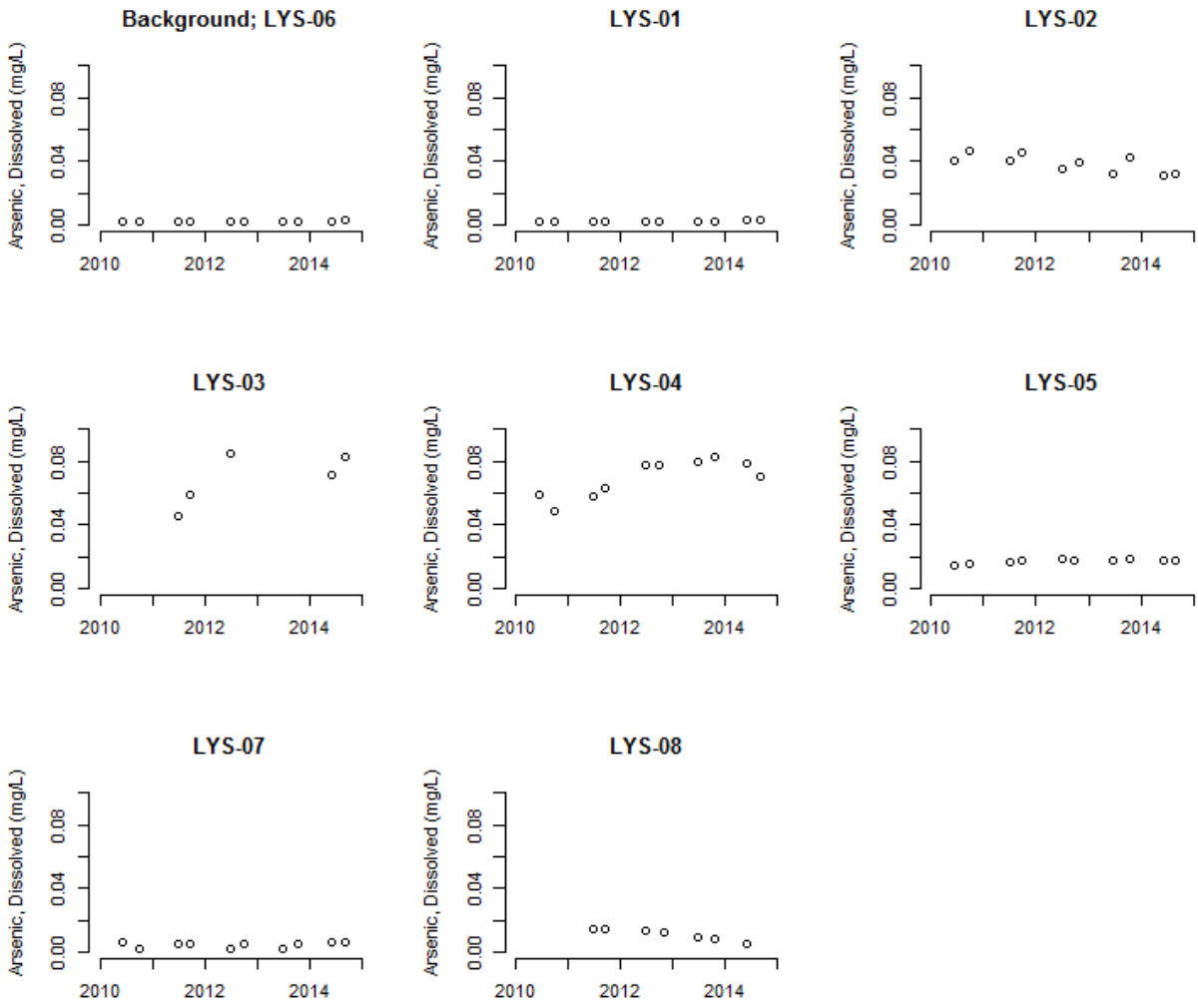

Figure 4-2. Arsenic concentrations in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

4.4.2 Cadmium

In 2014, cadmium concentrations in each MWRR lysimeter was similar to prior years [Figure 4-3]. No lysimeters appeared to have increasing cadmium concentrations [Figure 4-3]. Based on the paired *t*-test results, there was evidence (*p*-values <0.0019) that mean cadmium concentration in lysimeter LYS-05 was 0.00021 mg/L higher than in the background lysimeter [Table 4-8]. There was also evidence that mean cadmium concentrations in LYS-02 (*p*-value = 0.0150) and LYS-07 (*p*-value = 0.0368) were higher than in the background lysimeter, but only by a relatively small amount (0.00005 mg/L and 0.00004 mg/L for each respectively) [Table 4-8].

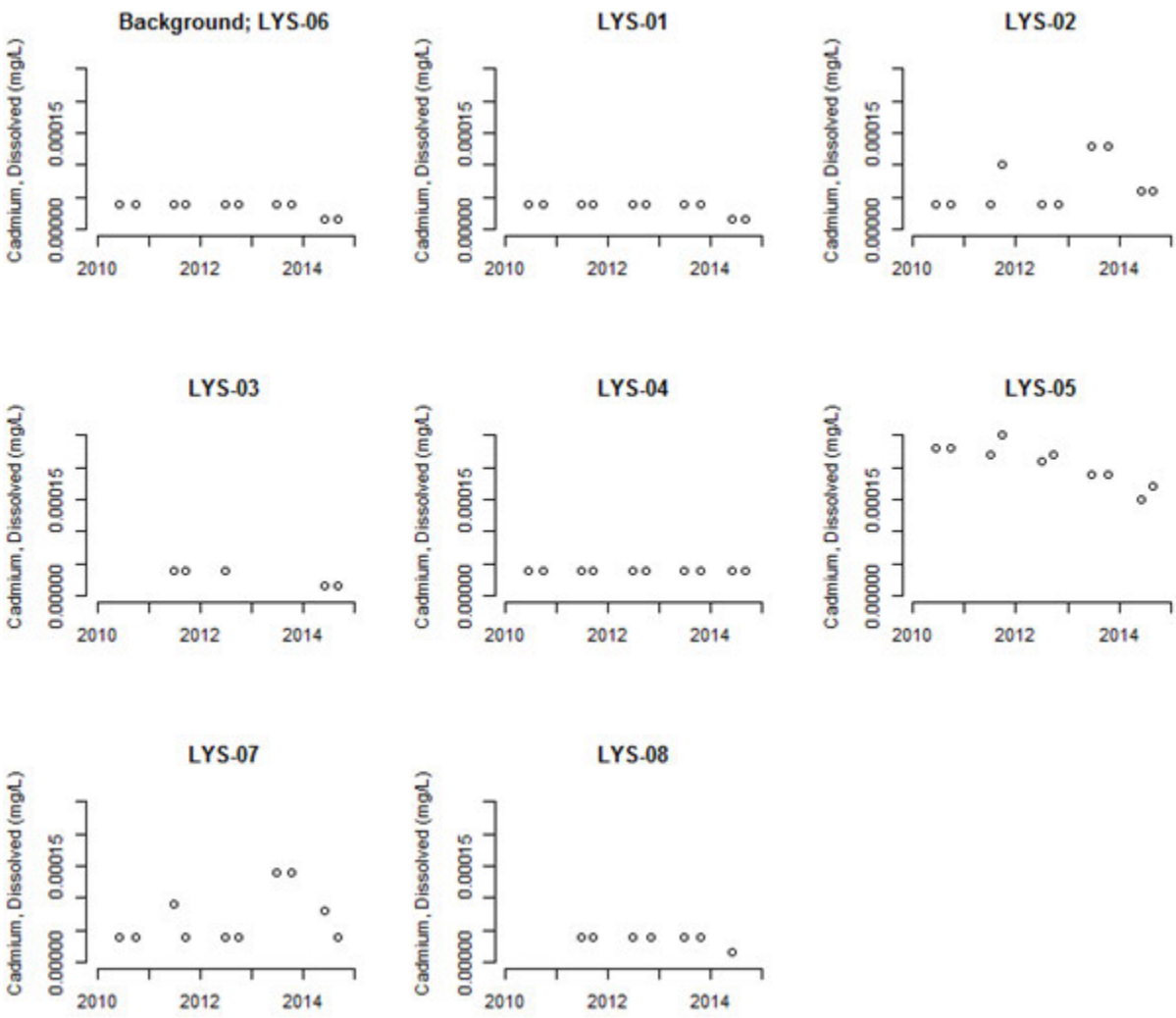

Figure 4-3. Cadmium concentrations in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

4.4.3 Copper

In 2014, copper concentrations in each MWRR lysimeter was similar to prior years [Figure 4-4]. It appears possible that copper concentrations in LYS-02 may be increasing over time at a modest rate, however this apparent trend is likely the result of random variation given the limited number of samples [Figure 4-4]. Based on the paired *t*-test results, there was evidence (*p*-value = 0.0006) that mean copper concentration in lysimeter LYS-05 was 0.007 mg/L were higher than in the background lysimeter [Table 4-8]. There was also some evidence that mean copper concentrations in LYS-01 (*p*-value = 0.0037) and LYS-04 (*p*-value = 0.0260) were different than in the background lysimeter; mean copper concentrations were 0.004 mg/L lower in LYS-01 and 0.003 mg/L higher in LYS-04 than in the background lysimeter [Table 4-8].

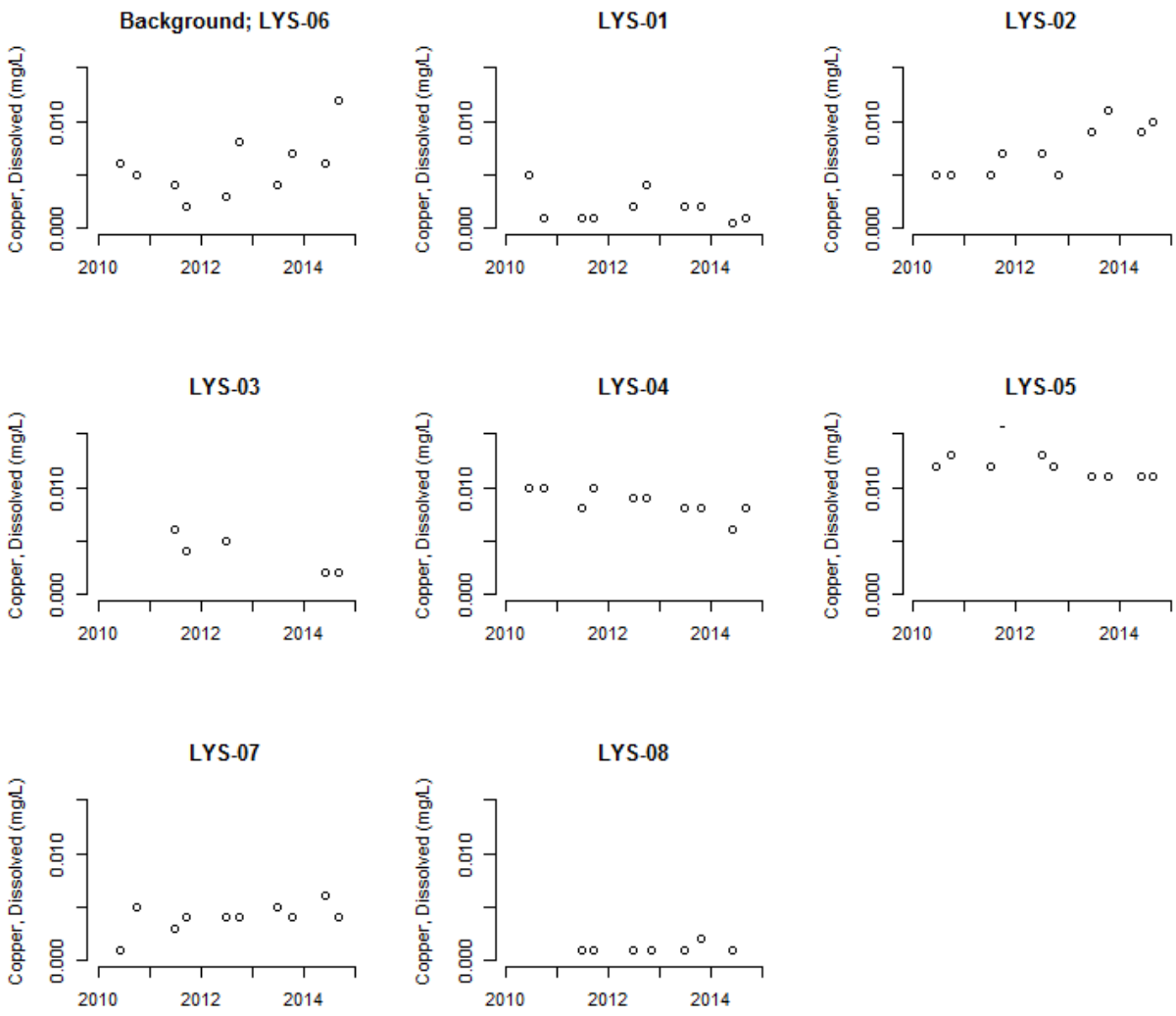

Figure 4-4. Copper concentrations in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

4.4.4 Lead

In 2014, lead concentrations in each MWRR lysimeter was similar to prior years [Figure 4-5]. No lysimeters appeared to have increasing lead concentrations [Figure 4-5]. Based on the paired *t*-test results, there was no evidence (all *p*-values >0.3434) that mean lead concentration in any monitoring lysimeter was higher than in the background lysimeter [Table 4-8].

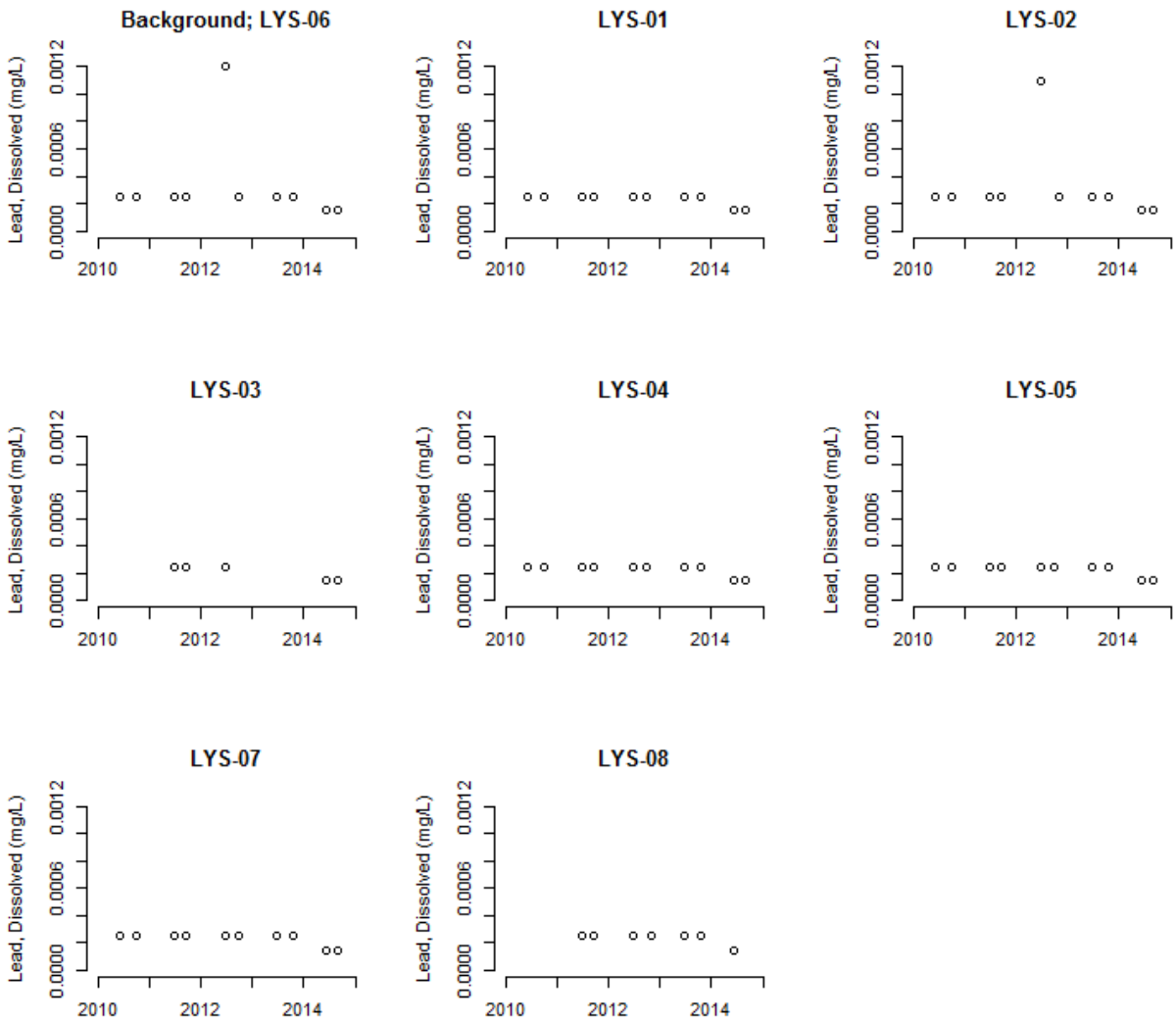

Figure 4-5. Lead concentrations in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

4.4.5 Mercury

In 2014, mercury concentrations in each MWRR lysimeter was similar to prior years [Figure 4-6]. No lysimeters appeared to have increasing mercury concentrations [Figure 4-6]. Based on the paired *t*-test results, there was no evidence (all *p*-values >0.1855) that mean mercury concentration in any monitoring lysimeter was higher than in the background lysimeter [Table 4-8].

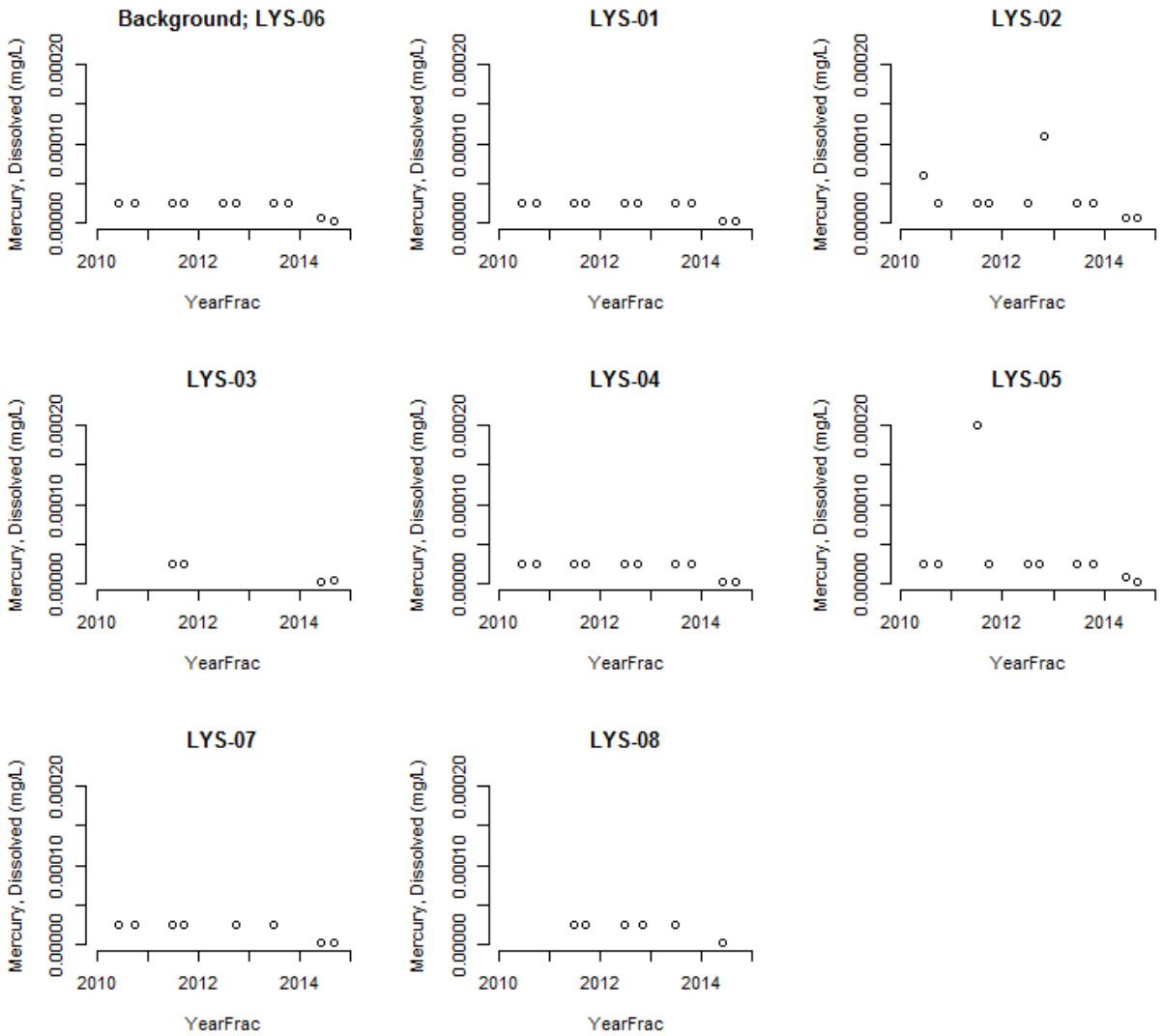

Figure 4-6. Mercury concentrations in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

4.4.6 Zinc

In 2014, zinc concentrations in each MWRR lysimeter was similar to prior years [Figure 4-7]. No lysimeters appeared to have increasing zinc concentrations [Figure 4-7]. Based on the paired *t*-test results, there was evidence (*p*-value = 0.0202) that mean zinc concentration in lysimeter LYS-05 was 0.009 mg/L higher than in the background lysimeter [Table 4-8]. For other lysimeters, there was no evidence (all *p*-values ≥0.1487) that mean zinc concentrations in any other monitoring lysimeter was higher than in the background lysimeter [Table 4-8].

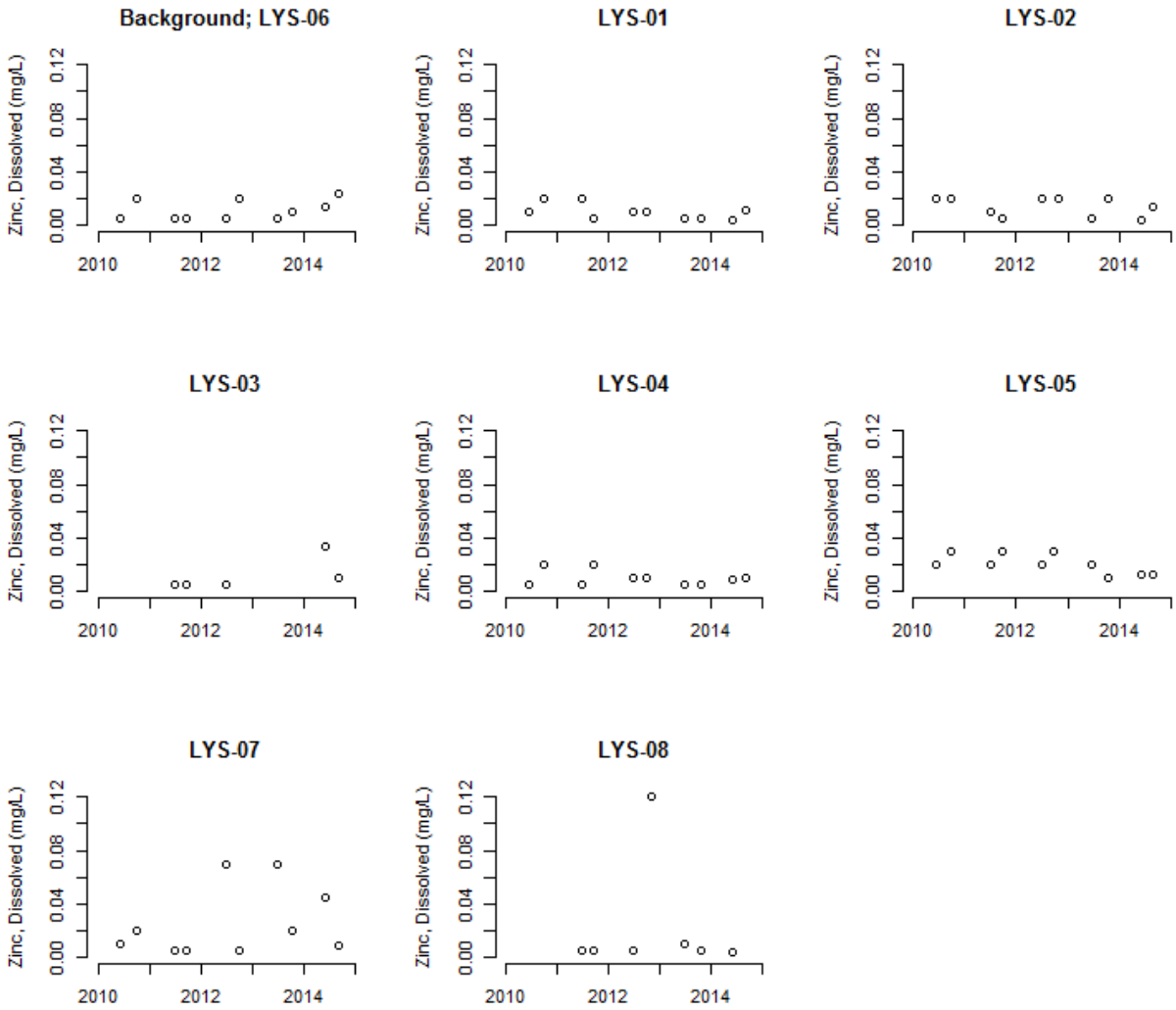

Figure 4-7. Zinc concentrations in lysimeters of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014. Samples below the analytical reporting limit (RL) are represented as half the RL.

Table 4-8. Results of paired *t*-tests comparing mean concentrations in monitoring lysimeters to concentrations in background lysimeters in the vicinity of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2010-2014.

Contaminant of concern	Monitoring lysimeter	*t*-statistic	*p*-value	Difference from background (mean; mg/L)
Arsenic	LYS-01	1.00	0.3434	0.000
	LYS-02	19.73	<0.0001	0.036
	LYS-04	18.09	<0.0001	0.067
	LYS-05	37.11	<0.0001	0.015
	LYS-07	4.32	0.0019	0.002
Cadmium	LYS-01*	---	---	0
	LYS-02	3.00	0.0150	0.00005
	LYS-04*	---	---	0
	LYS-05	21.00	<0.0001	0.00021
	LYS-07	2.45	0.0368	0.00004
Copper	LYS-01	-3.89	0.0037	-0.004
	LYS-02	1.69	0.1247	0.002
	LYS-04	2.66	0.0260	0.003
	LYS-05	5.13	0.0006	0.007
	LYS-07	-1.68	0.1272	-0.002
Lead	LYS-01	-1.00	0.3434	-0.0001
	LYS-02	-1.00	0.3434	0.0000
	LYS-04	-1.00	0.3434	-0.0001
	LYS-05	-1.00	0.3434	-0.0001
	LYS-07	-1.00	0.3434	-0.0001
Mercury	LYS-01	-1.00	0.3434	0.000000
	LYS-02	1.43	0.1855	0.000013
	LYS-04	-1.00	0.3434	0.000000
	LYS-05	1.01	0.3377	0.000018
	LYS-07	-1.00	0.3506	0.000000
Zinc	LYS-01	-0.45	0.6608	-0.001
	LYS-02	0.94	0.3717	0.003
	LYS-04	-0.52	0.6124	-0.001
	LYS-05	2.82	0.0202	0.009
	LYS-07	1.58	0.1487	0.015

* All sample concentrations in the background and monitoring well were below the analytical detection limit.

4.5 DISCUSSION

4.5.1 Contaminants of Concern

Each COC concentration in each lysimeter was similar in 2014 to prior monitoring years indicating that there is relatively little interannual variability in vadose zone COC concentrations in the MWRR. Based on the five year time series at each lysimeter, there generally do not appear to be increasing COC concentrations at any of these lysimeters with a few exceptions. It did appear possible that arsenic concentrations in LYS-03 and LYS-04 and copper concentration in LYS-02 have increased over time. However, these apparent increases are small and there are relatively few observations (10 or fewer) from which to make these determinations. A formal statistical analysis (e.g., simple linear regression) might provide some insight about whether these apparent relationships (between COC concentrations and time) in these lysimeters were statistically significant. However, it would be important to understand that such an analysis would only apply to the observed time period and therefore would provide limited insight into the likelihood that those trends would continue through time. Extrapolating a temporal trend in COC concentrations from the 2010-2014 time period to more extended time periods (e.g., through 2030) may not be appropriate.

Statistical tests (paired *t*-tests) were applied to compare mean COC concentrations in each monitoring lysimeter to the background lysimeter to assess if there were statistically significant differences in concentrations given the variation in the data. Of particular interest would be those lysimeters with mean concentrations which are higher than in the background lysimeter. Monitoring lysimeter LYS-05 had significantly higher arsenic, cadmium, copper, and zinc concentrations compared to the background lysimeter. Monitoring lysimeters LYS-02 and LYS-07 had significantly higher arsenic and cadmium concentrations compared to the background lysimeter. Monitoring lysimeter LYS-04 had significantly higher arsenic and copper concentrations compared to the background lysimeter.

Although these data support the conclusion that arsenic, cadmium, copper, and zinc concentrations are elevated in some monitoring lysimeters compared to the background lysimeter, the question of whether or not a single background lysimeter adequately represents background COC concentrations in the soil outside of the MWRR is not addressed. One method to reduce potential bias in the background COC concentrations associated with the small number of background sample sites (n = 1) would be to increase the number of background lysimeters. However, increasing the number of background lysimeters would not address the issue of causation. Even with additional background lysimeters, the question of whether differences in COC concentrations between background and monitoring samples were caused by leaching of COCs from the MWRR or by inherent differences in concentrations in soils sampled by those particular lysimeters would remain uncertain.

Vadose zone sampling is conducted to provide advance notice in the event that there are releases of COCs from the repository which might threaten groundwater or surface water. Arsenic concentrations in LYS-03 and LYS-04 during both sample periods of 2014 exceeded the human health surface water or groundwater standards (both 0.01 mg/L; MDEQ [2012a]) by at least six times and these concentrations are consistent with prior monitoring. However, arsenic

was the only COC to exceed the human health groundwater standard at groundwater monitoring wells in the vicinity of the MWRR in 2014 and that exceedance occurred in the background well. In 2014, all surface water sample sites in Subareas 1 had arsenic concentrations that were below the most restrictive standard. Therefore, it does not appear that arsenic leaching from the MWRR into vadose zone water currently impedes either groundwater or surface water performance goals and further vadose zone monitoring will be conducted to determine whether there is a trend that indicates releases of COCs from the repository.

4.5.2 Data Validation

Quality assurance and quality control results for vadose zone water are combined with groundwater (see Section 3.3.1).

5.0 MACROINVERTEBRATES AND PERIPHYTON[19]

5.1 INTRODUCTION

Silver Bow Creek is a tributary to the Clark Fork River that extends from Butte, Montana approximately 23 miles downstream to the Warm Springs Ponds just north of Opportunity, Montana. Silver Bow Creek was impacted by mining waste and municipal sewage inputs from the 1870s through the 1980s. The earliest impacts resulted from underground mining and included waste rock, slag, and mill tailings that were deposited directly into the stream. In 1908 a major flood redistributed the waste rock and tailings downstream throughout the channel and floodplain. Mining efforts in the area shifted to open-pit operations with the 1955 opening of the Berkeley Pit mine near Butte. Open-pit mining ceased in the Berkeley Pit in 1982; however, copper precipitate is currently mined from the waters of the Berkeley Pit and mining continues in the nearby Continental Pit (molybdenum and copper). The ancestral headwaters of Silver Bow Creek have now been entirely subsumed into the Berkeley and Continental Pits and the city of Butte metro sewer system.

Currently Silver Bow Creek and its adjacent floodplain are undergoing remediation that includes excavation and removal of tailings and impacted soils from the floodplain, replacement of the removed tailings with local fill material, seeding and planting of vegetation, and reconstruction of the stream channel. The portion of the creek and its adjacent floodplain undergoing remediation is designated the Streamside Tailings Operable Unit (SSTOU) and is divided into four subareas [Figure 5-1]. Remediation has already been accomplished in most subareas.

A plan was established to monitor several factors as remediation progressed including surface water, instream sediments, geomorphology, groundwater, and aquatic biologic resources. Aquatic invertebrates and periphyton are major components of the biota present in Silver Bow Creek and thus play important roles in the comprehensive monitoring plan. General performance goals have been stated for aquatic invertebrates and periphyton in Silver Bow Creek: the assemblages should reflect a "balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitat of the region" [Karr and Dudley, 1981].

This report describes the analysis of a subset of the aquatic invertebrate and periphyton monitoring programs, specifically the samples collected from Silver Bow Creek in 2014. The benthic invertebrate fauna was analyzed with a number of biointegrity metrics which were combined into three indices: the MVFP bioassessment index which was developed to evaluate the biological integrity of montane streams [Bollman, 1998]; the Hilsenhoff Biotic Index [Hilsenhoff, 1987], which has a long history in biomonitoring studies; and the metals tolerance index [McGuire, 2009], which is specifically designed to examine metal pollution. The

[19] Chapter 5 was completed by Wease Bollman, Billie Kerans, Jennifer Bowman, and Sean Sullivan of Rhithron Associates with minor editing and formatting by RESPEC.

periphyton assemblage was analyzed using the biointegrity metrics described by Bahls [1993]. In addition, the taxonomic and functional composition of the benthic flora and fauna was investigated to gain information about probable stressors to water quality and habitat integrity. This information is described in a series of site-specific narratives.

5.2 METHODS

5.2.1 Sampling

Aquatic invertebrates and periphyton were sampled at 17 sites in the Silver Bow Creek watershed during the period September 9-11, 2014. Sites are described in Table 5-1. Samples were delivered to Rhithron Associates (Missoula, Montana) for processing and identification. Field work included habitat assessments: 10 habitat parameters were visually assessed and subjectively rated on a numeric scale. Ratings for each parameter were summed to obtain a total score for each sampled site.

Table 5-1. Macroinvertebrate and periphyton sampling locations in the Streamside Tailings Operable Unit, September 9-11, 2014.

Site ID	Site Location	Location (GPS coordinates, NAD 83)	
		Latitude	Longitude
SS-01	Blacktail Creek at Father Sheehan Park	45.98532	-112.50772
SS-05A	Silver Bow Creek above Butte Reduction Works	45.99653	-112.54343
SS-06G	Silver Bow Creek above WWTP	45.99458	-112.55146
SS-07[20]	Silver Bow Creek below WWTP	45.99648	-112.56316
SS-08	Silver Bow Creek at Rocker	45.99679	-112.56470
SS-10A	Silver Bow Creek above Sand Creek	46.00167	-112.60490
SS-10B	Silver Bow Creek below Sand Creek	46.00375	-112.66084
SS-11C	Silver Bow Creek above Browns Gulch	46.00429	-112.66160
SS-11D	Silver Bow Creek below Browns Gulch	46.00336	-112.70172
SS-13	Silver Bow Creek in Reach L	46.00342	-112.70304
SS-14	Silver Bow Creek at Miles Crossing	46.00647	-112.71394
SS-15A	Silver Bow Creek above German Gulch	46.01142	-112.72270
SS-15B	Silver Bow Creek below German Gulch	46.02170	-112.78969
SS-15G	German Gulch near confluence	46.02263	-112.79175
SS-16	Silver Bow Creek in Reach P near Fairmont	46.02170	-112.79029
SS-17D[21]	Silver Bow Creek below Stewart Street at Opportunity	46.05494	-112.79611
SS-19	Silver Bow Creek at Frontage Road	46.10787	-112.80553

[20] Co-located with USGS streamflow gauge 12323250.

[21] Co-located with USGS streamflow gauge 12323600.

5.2.2 Laboratory Analysis

Subsamples of 300 (±20%) organisms were obtained using methods consistent with Montana Department of Environmental Quality (MDEQ) standard operating procedures [MDEQ, 2012c]: Caton sub-sampling devices [Caton, 1991], divided into 30 grids, each approximately 6x6 cm were used. Each individual sample was thoroughly mixed in its jar(s), poured out and evenly spread into the Caton tray, and individual grids were randomly selected. The contents of each grid were examined under stereoscopic microscopes using 10x - 30x magnification. All aquatic invertebrates from each selected grid were sorted from the substrate, and placed in 80% ethanol for subsequent identification. Grid selection, examination, and sorting continued until at least 300 (±20%) organisms were sorted. The final grid was completely sorted of all organisms. All unsorted sample fractions were retained and stored at the Rhithron laboratory.

Organisms were individually examined by certified taxonomists, using 10x – 80x stereoscopic dissecting scopes (Leica S8E) and identified to the lowest practical level consistent with MDEQ [MDEQ, 2012c] data requirements, using appropriate published taxonomic references and keys.

Identification, counts, life stages, and information about the condition of specimens were recorded on electronic bench sheets. Organisms that could not be identified to the taxonomic targets because of immaturity, poor condition, or lack of complete current regionally-applicable published keys were left at appropriate taxonomic levels that were coarser than those specified. To obtain accuracy in richness measures, these organisms were designated as "not unique" if other specimens from the same group could be taken to target levels. Organisms designated as "unique" were those that could be definitively distinguished from other organisms in the sample. Identified organisms were preserved in 80% ethanol in labeled vials, and archived at the Rhithron laboratory.

Midges and worms were carefully morphotyped using 10x – 80x stereoscopic dissecting microscopes (Leica S8E) and representative specimens were slide mounted and examined at 200x – 1000x magnification using an Olympus BX 51 compound microscope. Slide mounted organisms were archived at the Rhithron laboratory.

Periphyton samples, preserved with Lugol's solution, were topped-off upon arrival at the laboratory. Permanent diatom slides were prepared: subsamples were taken and treated with concentrated nitric acid. Acid-treated samples were digested under heat and pressure in a microwave digestion apparatus. Samples were neutralized by rinses with distilled water, and subsample volumes were adjusted to obtain adequate densities for analysis. Small amounts of each sample were dried onto 22-mm square coverslips. Coverslips were mounted on slides using Naphrax diatom mount. To ensure a high quality mount for identification and to make replicates available for archives, three slide mounts were made from each sample. One of the replicates was selected for identification. A diamond scribe mark was made to define a transect line on the cover slip, and a minimum of 600 diatom valves were identified along the transect mark. A Leica DM 2500 compound microscope, Nomarski contrast, and 1000x magnification were used for identifications. Diatoms were identified to the lowest possible taxonomic level, generally species, following standard taxonomic references.

For soft-bodied (non-diatom) algae samples, the raw periphyton sample was manually homogenized and emptied into a porcelain evaporating dish. A small, random sub-sample of

algal material was pipetted onto a standard glass microscope slide. Visible (macroscopic) algae were sub-sampled, in proportion to their estimated importance relative to the total volume of algal material in the sample, and added to the liquid fraction on the slide to make a wet mount. Soft-bodied algae were identified to genus using an Olympus BHT compound microscope under 200x and 400x. Relative abundances of each algal genus, and of all diatom genera collectively, were estimated for comparative purposes. Soft-bodied genera and the diatom component were also ranked according to their estimated contribution to the total algal biovolume present in the sample.

5.2.3 Quality Assurance Systems

Quality control (QC) procedures for initial sample processing and subsampling involved checking sorting efficiency. These checks were conducted on 100% of the samples by independent technicians who microscopically re-examined at least 25% of sorted substrate from each sample. Quality control procedures for each sample proceeded as follows:

The quality control technician poured the sorted substrate from a processed sample out into a Caton tray, redistributing the substrate so that 25% of it could be accurately lifted out by removing entire grids in a random fashion. Grids were selected, and re-examined until 25% of the substrate was re-sorted. All organisms that were missed were counted and this number was added to the total number obtained in the original sort. Sorting efficiency was evaluated by applying the following calculation:

$$SE = \frac{n_1}{n_1 + n_2} \times 100$$

where: SE is the sorting efficiency (%), n_1 is the total number of specimens in the first sort, and n_2 is the total number of specimens expected in the second sort, based on the results of the re-sorted 25%.

Quality control procedures for taxonomic determinations of invertebrates involved checking accuracy, precision and enumeration. Two samples were randomly selected and all organisms re-identified and counted by an independent taxonomist. Taxa lists and enumerations were compared by calculating a Bray-Curtis similarity statistic [Bray and Curtis, 1957] for each selected sample. The Percent Taxonomic Disagreement (PTD) and Percent Difference in Enumeration (PDE) were also calculated. Routinely, discrepancies between the original identifications and the quality control identifications are discussed among the taxonomists, and necessary rectifications to the data are made. Discrepancies that cannot be rectified by discussions are routinely sent out to taxonomic specialists for identification. However, taxonomic certainty for identifications in this project was high and no external verifications were necessary.

No quality control comparisons were performed for periphyton samples. The accuracy and reproducibility of results is assured by consultations with external phycologists when problematic taxa are encountered. Routinely, these taxa are recorded in a series of high-definition digital photographs and exchanged via email. Discrepancies in identifications are

discussed, and rectifications are made to the data. Taxonomic certainty for identifications in this project was high, and no external consultations were necessary.

5.2.4 Data Analysis

For aquatic invertebrates, taxa lists and counts for each sample were constructed. Approximately 72 standard metric expressions of taxonomic, function and habit characters, and tolerance attributes were calculated, using customized database software. Aquatic invertebrate metrics included the Hilsenhoff Biotic Index (HBI), with tolerance values and impact threshold modified for Montana fauna [McGuire, 2010], and the Metals Tolerance Index (MTI) which was developed by McGuire [2010] for the Clark Fork River watershed. Table 5-2 shows scoring criteria applied by McGuire for these metrics.

Table 5-2. Hilsenhoff Biotic Index (HBI) and Metals Tolerance Index (MTI): Metrics modified and developed by McGuire [2010] for assessing biological integrity in the Clark Fork River basin.

Metric	"no impact" ----------"severe impact"						
HBI	< 4.0	4.0 – 4.5	4.6 – 5.1	5.2 – 5.7	5.8 – 6.3	6.4 – 6.9	> 6.9
MTI	< 4.0	4.0 – 4.9	5.0 – 5.9	6.0 – 6.9	7.0 – 7.9	8.0 – 8.9	> 8.9

Six calculated metrics [Table 5-3] were combined into the Montana Valley and Foothill Prairies (MVFP) bioassessment index [Bollman, 1998]. The MVFP index is a quantitative measure which may be useful in assessing progress toward attainment of the general goal of a "balanced, integrated, adaptive community" of aquatic invertebrates, as envisioned by Karr and Dudley [1981].

Table 5-3. Component metrics and scoring scheme for the aquatic invertebrate-based Montana Valley and Foothill Prairies (MVFP) bioassessment index [Bollman, 1998].

Metric	Metric score			
	3	**2**	**1**	**0**
	Metric values			
Ephemeroptera richness	>5	5 – 4	3 – 2	<2
Plecoptera richness	>3	3 – 2	1	0
Trichoptera richness	>4	4 – 3	2	<2
Number of sensitive taxa	>3	3 – 2	1	0
Percent filterers	0 - 5	5.01 – 10	10.01 – 25	>25
Percent tolerant taxa	0 - 5	5.01 - 10	10.01 - 35	>35

To arrive at an MVFP index score and impairment classification, each component metric value is calculated, based on the taxonomic, functional, and tolerance attributes of the aquatic

invertebrate assemblage, and categorical scores are assigned to each metric. Metric scores are summed for a total score, which is expressed as a percentage of the maximum total score.

Taxa lists and counts for each diatom sample were constructed. Approximately 32 metric expressions of taxonomic, habitat preference, and tolerance attributes were calculated. Diatom metrics included the probability of sediment impairment [Teply, 2010], which is based on a discriminant function analysis of the occurrence of diatoms known to increase in abundance when deposited sediment influences community composition. This is currently the only diatom metric for which a threshold has been established by MDEQ for the Middle Rockies ecoregion.

Seven diatom metrics [Table 5-4] were combined into the Montana Mountains (MTM) bioassessment index [Bahls, 1993], which was used in previous analyses and reports for Silver Bow Creek watershed sites to evaluate biological integrity [Confluence, 2011; 2013a; 2013b; 2015]. The MTM overall biointegrity rating for a site is the lowest rating for any one metric calculated for that site.

Soft-bodied (non-diatom) algae were ranked according to estimates of relative abundances; these rankings were used descriptively in the narrative ecological interpretations for each site.

Table 5-4. Component metrics and scoring scheme for the Montana Mountains (MTM) diatom-based bioassessment index [Bahls, 1993].

Metric	Biological integrity rating			
	Excellent	Good	Fair	Poor
	Metric values			
Species richness	>29	20-29	19-10	<10
Shannon diversity	>2.99	2.00-2.99	1.00-1.99	<1.00
Pollution index	>2.50	2.01-2.50	1.50-2.00	<1.50
Siltation index	<20.0	20.0-39.9	40.0-59.9	>59.9
Disturbance index	<25.0	25.0-49.9	50.0-74.9	>74.9
% Dominant species	<25.0	25.0-49.9	50.0-74.9	>74.9
% Abnormal cells	0	>0.0, <3.0	3.0-9.9	>9.9

5.2.5 Ecological Interpretations: Approach

We used narrative interpretations of taxonomic and functional composition of invertebrate assemblages to reveal the probable stressors in the Streamside Tailings Operable Unit. Often canonical procedures are used for stressor identification; however, the substantial data required for such procedures (e.g., surveys of habitat, historical and current data related to water quality, land use, point and non-point source influences, soils, hydrology, geology) were not readily available for this monitoring event. Instead our narrative interpretations are based on demonstrated associations between assemblage components and habitat and water quality variables gleaned from the published literature, the writer's own research (especially Bollman, 1998] and professional judgment, and the research [e.g., Wisseman, 1996] and professional

judgment of other expert sources. We did not refer to habitat assessments or any other SSTOU data while crafting these narratives.

We use attributes of invertebrate taxa that are well substantiated in diverse literature and that are generally accepted by regional aquatic ecologists as evidence of water quality and instream and reach-scale habitat conditions. The approach to this analysis uses some assemblage attributes that are interpreted as evidence of water quality and other attributes that are interpreted as evidence of habitat integrity. To arrive at impairment classifications, attributes are considered individually, so information is maximized by not relying on a single cumulative score, which may mask stress on the biota. Such an approach also minimizes the possibility of using inappropriate assessment strategies when the biota at a site is atypical of "characteristic" sites in a region. Below we describe the invertebrate attributes that were used and their relationships to water quality and habitat conditions.

Mayfly taxa richness, the Hilsenhoff Biotic Index (HBI) value [Hilsenhoff, 1987], the richness and abundance of hemoglobin-bearing taxa and the richness of sensitive taxa are often used as indicators of water quality. Mayfly taxa richness has been demonstrated to be significantly correlated with chemical measures of dissolved oxygen, pH, and conductivity [e.g., Fore et al., 1996; Wisseman, 1996; Bollman, 1998]. The HBI has a long history of use and validation [Cairns and Pratt, 1993; Smith and Tran, 2010; Johnson and Ringler, 2014]. In Montana mountains, the HBI was demonstrated to be significantly associated with conductivity, pH, water temperature, sediment deposition, and the presence of filamentous algae [Bollman, 1998]. Nutrient enrichment in Montana streams often results in large crops of filamentous algae [Watson, 1988]. Thus in these samples, when aquatic invertebrates associated or dependent on filamentous algae [e.g., Anderson, 1976; LeSage and Harrison, 1980] are abundant, the presence of filamentous algae and nutrient enrichment are also suspected. Sensitive taxa exhibit intolerance to a wide range of stressors [e.g., Hellawell, 1986; Friedrich, 1990; Wisseman, 1996; Barbour et al., 1999], including nutrient enrichment, acidification, thermal stress, sediment deposition, habitat disruption, and others. These taxa are expected to be present in predictable numbers in functioning montane and foothills streams [e.g., Bollman, 1998].

Among the diatoms, tolerance to nutrients has been established for many taxa [e.g., Fairchild et al., 1985; Carrick et al., 1988; Van Dam et al., 1994; Teply and Bahls, 2006; Bahls, 2004; 2005; 2006a; 2006b]. Worldwide diatom taxa with specific tolerances to saprobity, [e.g., Van Dam et al., 1994], organic pollution [e.g., Lange-Bertalot, 1979], salinity [e.g., Van Dam et al., 1994], conductivity and ionic composition [Potapova and Charles, 2003], and adaptations to sediment [e.g., Lowe, 1974; 2003] and general habitat disturbance [e.g., Lange-Bertalot, 1996] have been identified. Preferences related to pH are also established [e.g., Van Dam et al., 1994]. More pertinent are the autecological characteristics and tolerances established specifically for taxa of the northwestern United States and Montana [Bahls, 2004; 2005; 2006a], and the nutrient indicator taxa identified by Potapova and Charles [2007].

The richness and abundance of cold stenotherm taxa [Clark, 1997] and calculation of the temperature preference of the aquatic invertebrate assemblage [Brandt, 2001] can predict the thermal characteristics of the sampled site. Hemoglobin-bearing taxa are also indicators of

warm water temperatures [Walshe, 1947], since dissolved oxygen is directly associated with water temperature; oxygen concentrations can also vary with the degree of nutrient enrichment. Increased temperatures and high nutrient concentrations can, alone or in concert, create conditions favorable to hypoxic sediments, habitats preferred by hemoglobin-bearers.

The absence of invertebrate groups known to be sensitive to metals and the Metals Tolerance Index [Bukantis, 1998] are considered signals of possible metals contamination. Metals sensitivity for some groups, especially the heptageniid mayflies, is well-known [e.g., Kiffney and Clements, 1994; Clements, 1999; 2004; Montz et al., 2010; Iwasaki et al., 2013]. In the present approach, the absence of these groups in environs where they are typically expected to occur is considered a signal of possible metals contamination, but only when combined with a measure of overall assemblage tolerance of metals. The Metals Tolerance Index ranks taxa according to their sensitivity to metals. Weighting taxa by their abundance in a sample, assemblage tolerance is estimated by averaging the tolerance of all sampled individuals.

Indications of metal contamination can also be discerned in diatom assemblages. Species that increase in abundance with contamination are listed in Bahls [1993].

Characteristics of the aquatic invertebrate assemblages can also reveal the condition of instream and streamside habitats. Stress from sediment is evaluated by caddisfly richness and by "clinger" richness [Kleindl, 1995; Bollman, 1998; Karr and Chu, 1999; Wagenhoff et al., 2012; Leitner et al., 2015]. A newer tool, the Fine Sediment Biotic Index (FSBI) [Relyea et al., 2012] shows promise when applied to the montane and foothills regions. This index and its interpretation are modified in this report, based on the author's professional judgment, to more effectively characterize Silver Bow Creek in the sampled reaches.

Sediment tolerance among the diatoms has been established [Lowe, 1974] and is demonstrated for motile varieties, which can alter their position in response to alteration of substrates by sediment deposition. Groups of diatoms known to increase with sediment in Montana mountain streams [Teply and Bahls, 2006; 2007; Teply, 2010] serve as indicators of probable stress.

The functional characteristics of aquatic invertebrate assemblages are based on the morphology and behaviors associated with feeding, and are interpreted in terms of the River Continuum Concept [Vannote et al., 1980] in the narratives. Alterations from predicted patterns in montane and foothills streams may be interpreted as evidence of water quality or habitat disruption. For example, shredders and the microbes they depend on are sensitive to modifications of the riparian zone [Plafkin et al., 1989].

5.3 RESULTS

5.3.1 Quality Assurance Systems

Results of internal quality control procedures for subsampling and taxonomy for aquatic invertebrate samples are given in Table 5-5. Sorting efficiency averaged 97.9% over the 17 samples in this project. The similarity between original identifications and enumerations for the two quality control samples averaged 97.2%. Percent taxonomic disagreement (PTD) averaged

2.85%, and the percent difference in enumeration (PDE) averaged 0.08%. Rhithron's internal quality standards (consistent with industry norms) were: ≥95% for sorting efficiency; ≥95% for Bray-Curtis similarity; ≤5% for PTD; and ≤5% for PDE [Stribling et al., 2003].

5.3.2 Bioassessment

Values for the six MVFP aquatic invertebrate metrics are shown in Table 5-6. MVFP scores and associated impairment classifications are given in Table 5-7. Figure 5-1 graphs the 2014 MVFP scores, as percent of maximum possible score, for all of the sites. One site, SS-15G (German Gulch near confluence) was rated slightly impaired. Eleven of the 17 sites were moderately impaired, and five sites were severely impaired. Sites with severe impairment (SS-05A, SS-06G, SS-07, SS-11C, and SS-16B) generally exhibited very low abundance and richness among mayflies along with high proportions of filter-feeders, tolerant taxa, or both. Tolerant taxa that were more common at these sites included snails in the family Lymnaeidae.

Table 5-5. Results of quality assurance systems parameters for aquatic invertebrate samples. Silver Bow Creek watershed, September 9–11, 2014.

Site ID	Station name	Sorting efficiency	Bray-Curtis similarity	PTD	PDE
SS-01	Blacktail Creek at Father Sheehan Park	90.45%			
SS-05A	Silver Bow Creek above Butte Reduction Works	97.55%			
SS-06G	Silver Bow Creek above Butte WWTP	97.63%			
SS-07	Silver Bow Creek below Butte WWTP	100.00%	97.89%	2.27%	0.16%
SS-08	Silver Bow Creek at Rocker	97.53%			
SS-10A	Silver Bow Creek above Sand Creek	100.00%			
SS-10B	Silver Bow Creek below Sand Creek	100.00%	96.58%	3.42%	0.00%
SS-11C	Silver Bow Creek above Browns Gulch	100.00%			
SS-11D	Silver Bow Creek below Browns Gulch	100.00%			
SS-13	Silver Bow Creek in Reach L	91.84%			
SS-14	Silver Bow Creek at Miles Crossing	98.78%			
SS-15A	Silver Bow Creek above German Gulch	96.42%			
SS-15B	Silver Bow Creek below German Gulch	96.32%			
SS-15G	German Gulch near confluence	100.00%			
SS-16B	Silver Bow Creek in Reach P near Fairmont	100.00%			
SS-17D	Silver Bow Creek below Stewart St Opportunity	100.00%			
SS-19	Silver Bow Creek at Frontage Road	97.65%			

Table 5-6. MVFP [Bollman, 1998] metric results: Silver Bow Creek, September 9–11, 2014.

Site ID	Site Location	Metric					
		Ephemeroptera richness	Plecoptera richness	Trichoptera richness	Number of sensitive taxa	Percent filterers	Percent tolerant taxa
SS-01	Blacktail Creek at Father Sheehan Park	2	0	3	0	13.1	18.9
SS-05A	Silver Bow Creek above Butte Reduction Works	1	0	4	0	50.3	13.9
SS-06G	Silver Bow Creek above WWTP	1	0	2	0	46.7	32.8
SS-07	Silver Bow Creek below WWTP	1	0	2	0	14.3	36.2
SS-08	Silver Bow Creek at Rocker	0	0	0	0	10.5	2.8
SS-10A	Silver Bow Creek above Sand Creek	1	0	4	1	18.5	33.6
SS-10B	Silver Bow Creek below Sand Creek	2	0	2	0	19.1	29.6
SS-11C	Silver Bow Creek above Browns Gulch	0	0	6	0	27.4	37.2
SS-11D	Silver Bow Creek below Browns Gulch	2	0	6	0	20.3	51.3
SS-13	Silver Bow Creek in Reach L	0	0	7	0	16.4	52.5
SS-14	Silver Bow Creek at Miles Crossing	0	1	5	0	35.4	54.4
SS-15A	Silver Bow Creek above German Gulch	1	0	5	0	62.5	20.6
SS-15B	Silver Bow Creek below German Gulch	4	2	7	1	61.9	17.4
SS-15G	German Gulch near confluence	5	3	6	2	12.5	14.7
SS-16B	Silver Bow Creek in Reach P near Fairmont	1	0	4	0	30.4	50.8
SS-17D	Silver Bow Creek below Stewart Street at Opportunity	1	1	6	0	62.2	15.9
SS-19	Silver Bow Creek at Frontage Road	3	1	6	1	51.4	5.4

Table 5-7. Bioassessment scores and values for selected metrics calculated for Silver Bow Creek sites: MFVP [Bollman, 1998] aquatic invertebrate biointegrity scores, expressed as percent of maximum possible score, with impairment classifications; the Hilsenhoff Biotic Index (HBI) metric values; and the metals tolerance index [McGuire, 2009] metric values. Silver Bow Creek watershed, September 9–11, 2014.

Site ID	Site Location	MVFP score (% of max. score)	MVFP impairment classification	HBI	MTI
SS-01	Blacktail Creek at Father Sheehan Park	27.8	moderate	5.48	4.60
SS-05A	Silver Bow Creek above Butte Reduction Works	16.7	severe	5.78	4.96
SS-06G	Silver Bow Creek above Butte WWTP	11.1	severe	5.05	5.03
SS-07	Silver Bow Creek below Butte WWTP	11.1	severe	7.25	4.57
SS-08	Silver Bow Creek at Rocker	22.2	moderate	6.35	3.35
SS-10A	Silver Bow Creek above Sand Creek	27.8	moderate	6.66	4.03
SS-10B	Silver Bow Creek below Sand Creek	22.2	moderate	6.88	4.31
SS-11C	Silver Bow Creek above Browns Gulch	16.7	severe	5.63	4.04
SS-11D	Silver Bow Creek below Browns Gulch	27.8	moderate	5.98	3.92
SS-13	Silver Bow Creek in Reach 1	22.2	moderate	5.42	3.54
SS-14	Silver Bow Creek at Miles Crossing	22.2	moderate	4.67	3.79
SS-15A	Silver Bow Creek above German Gulch	22.2	moderate	5.06	4.49
SS-15B	Silver Bow Creek below German Gulch	50.0	moderate	4.47	4.43
SS-15G	German Gulch near confluence	61.1	slight	3.65	3.16
SS-16B	Silver Bow Creek in Reach P near Fairmont	11.1	severe	3.03	3.24
SS-17D	Silver Bow Creek below Stewart St Opportunity	27.8	moderate	4.02	4.16
SS-19	Silver Bow Creek at Frontage Road	44.4	moderate	4.53	4.28

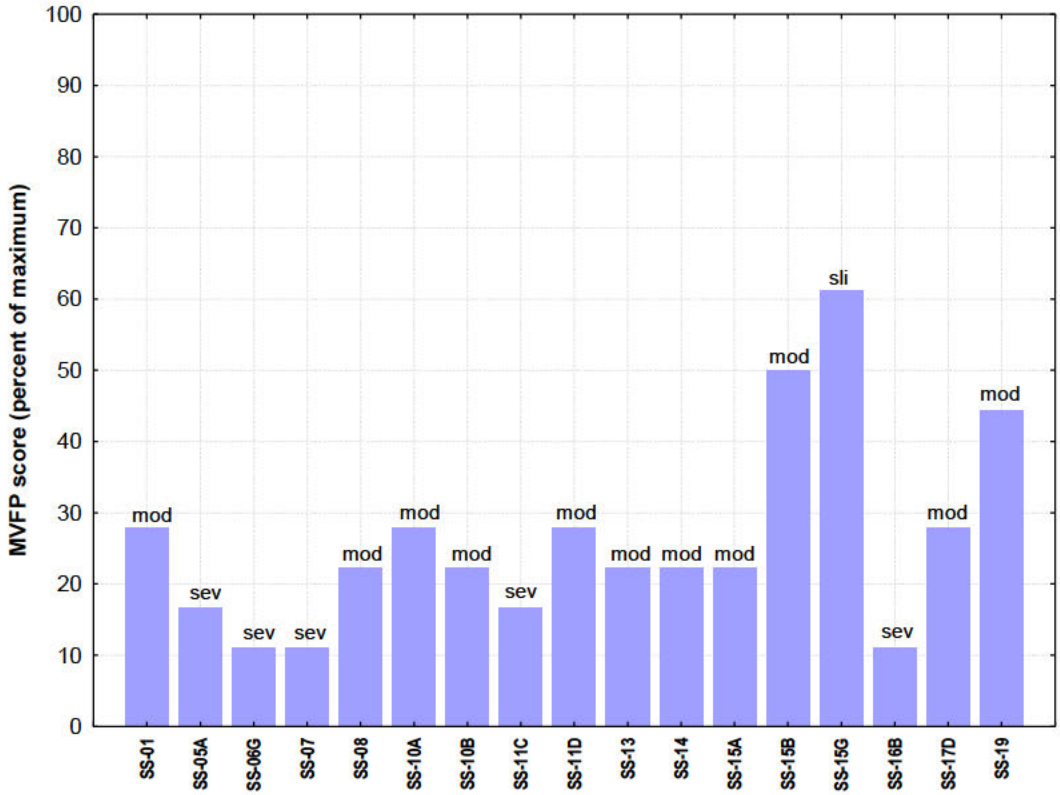

Figure 5-1. MVFP aquatic invertebrate biointegrity scores [Bollman, 1998], expressed as percent of maximum possible score: comparison among sites. Bars are labeled with MVFP index impairment classifications. Silver Bow Creek watershed, September 9–11, 2014.

The assemblages at sites with moderate impairment (SS-01, SS-08, SS-10A, SS-10B, SS-11D, SS-13, SS-14, SS-15A, SS-15B, SS-17D, and SS-19) were generally characterized by lower mayfly abundance, and greater proportions of leeches, planorbid and physid snails compared to the severely and slightly impaired sites.

HBI metric values were elevated relative to the impact threshold for nutrients determined by McGuire [2010] at all but three sites. Sites SS-15G, SS-16B and SS-17D were below or at the threshold value. Four sites (SS-07, SS-08, SS-10A and SS-10B) had exceptionally high (>6.0) values for the HBI, suggesting moderate to severe impairment by organic nutrients [McGuire, 2010]. HBI values for 2014 and McGuire's impact threshold are graphed in Figure 5-2.

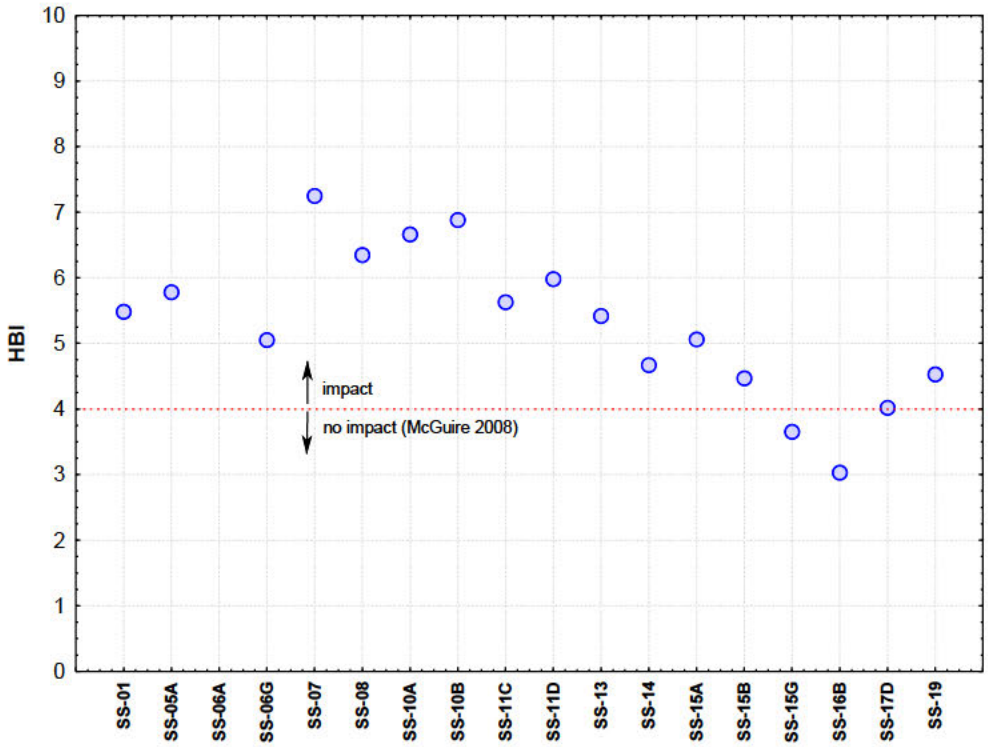

Figure 5-2. Hilsenhoff Biotic Index (HBI) values: comparison among sites. The red dashed line represents the presumed impact threshold determined for the Clark Fork River basin [McGuire, 2009]. (Site SS-06A was not sampled in 2014.) Silver Bow Creek watershed, September 9–11, 2014.

MTI metric values for nine sites were elevated relative to the impact threshold for metals determined by McGuire [2010]. Six sites (SS-08, SS-11D, SS-13, SS-14, SS-15G, and SS-16B) generated MTI values that indicated no impact from metals contamination, according to McGuire's guidance. MTI values for 2014 and McGuire's impact threshold are graphed in Figure 5-3.

Diatom assemblages at two sites achieved an MTM biointegrity [Bahls, 1993] ranking of "good", nine sites were rated "fair", and six sites were rated "poor". MTM metric results and overall biointegrity ratings, along with calculated probabilities of sediment impairment [Teply, 2010] are listed in Table 5-8. All sites achieved "excellent" or "good" ratings for 5 of the 7 metrics composing the MTM index. The Pollution Index and Siltation Index metrics largely determined the overall biointegrity ratings of all of the sites, with most sites scoring "fair" or "poor" rankings for these metrics.

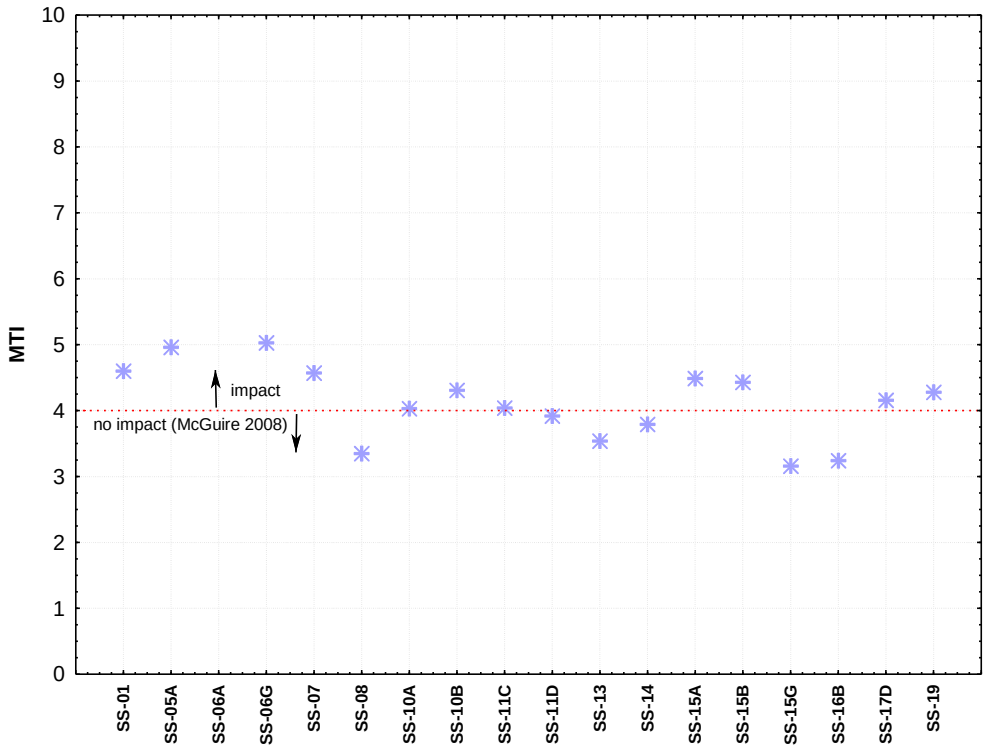

Figure 5-3. Metals tolerance index (MTI) values: comparison among sites. The red dashed line represents the presumed impact threshold determined for the Clark Fork River basin [McGuire, 2009]. (Site SS-06A was not sampled in 2014.) Silver Bow Creek watershed, September 9–11, 2014.

Algal assemblages in the Silver Bow Creek watershed in 2014 were notable because of the absence or very low abundances of the disturbance indicator species: *Achnanthidium minutissimum*, which is frequently the most common diatom at sites in the montane regions of the west. Species tolerant of alkaline conditions dominated most of the Silver Bow Creek watershed diatom assemblages, and many samples harbored high proportions of taxa tolerant of metals contamination, nutrients, or both. In terms of estimated biomass, diatoms were the dominant algal form at all but three sites. The filamentous green alga *Cladophora* sp. was estimated to have the largest biomass among algal taxa at site SS-08, and another filamentous green taxon, *Oedogonium* sp., dominated the algal biomass at sites SS-13 and SS-17D.

One site (SS-15G) exceeded the MDEQ threshold for sediment impairment: the calculated probability of impairment due to deposited sediment at this site was 55.8%. (The MDEQ threshold for impairment is 51%). Sediment impairment probabilities for the diatom assemblages sampled in 2014 are listed in Table 5-8 and graphed in Figure 5-4.

Table 5-8. MTM diatom biointegrity index [Bahls, 1993] and sediment impairment probability [Teply, 2010]. Ratings[22] are determined for each MTM metric, and the MTM biointegrity classification is the lowest rating among the seven metrics. The probability of sediment impairment is based on the relative abundances of sediment increaser taxa. The current MDEQ threshold for sediment impairment is 51%: sites with probabilities above 51% would be classified as sediment impaired using current MDEQ criteria. Silver Bow Creek watershed, September 9–11, 2014.

Site ID	Site Location	Species richness	Shannon diversity	Pollution index	Siltation index	Disturbance index	% Dominant species	% Abnormal cells	MTM biointegrity	Probability of sediment impairment (Teply, 2010)
SS-01	Blacktail Creek at Father Sheehan Park	E	E	G	G	E	E	E	G	27.90%
SS-05A	Silver Bow Creek above Butte Reduction Works	E	E	F	F	E	E	E	F	22.40%
SS-06G	Silver Bow Creek above Butte WWTP	E	E	G	G	E	E	G	G	37.00%
SS-07	Silver Bow Creek below Butte WWTP	G	G	P	P	E	G	E	P	15.00%
SS-08	Silver Bow Creek at Rocker	G	E	F	P	E	G	E	P	27.80%
SS-10A	Silver Bow Creek above Sand Creek	G	E	F	P	E	G	G	P	19.20%
SS-10B	Silver Bow Creek below Sand Creek	E	E	G	F	E	E	G	F	35.00%
SS-11C	Silver Bow Creek above Browns Gulch	E	E	G	F	E	E	G	F	32.90%
SS-11D	Silver Bow Creek below Browns Gulch	E	E	G	F	E	E	G	F	20.00%
SS-13	Silver Bow Creek in Reach L	E	E	G	F	E	E	G	F	28.70%
SS-14	Silver Bow Creek at Miles Crossing	E	E	F	F	E	E	G	F	25.90%
SS-15A	Silver Bow Creek above German Gulch	E	E	F	F	E	E	G	F	26.30%
SS-15B	Silver Bow Creek below German Gulch	E	E	F	F	E	E	G	F	24.70%
SS-15G	German Gulch near confluence	E	E	G	F	E	E	G	F	55.80%
SS-16B	Silver Bow Creek in Reach P near Fairmont	E	G	P	P	E	G	G	P	13.90%
SS-17D	Silver Bow Creek below Stewart St at Opportunity	E	E	F	P	E	E	G	P	14.70%
SS-19	Silver Bow Creek at Frontage Road	E	E	F	P	E	E	G	P	24.00%

[22] Rating categories: P = poor, F = fair, G = good, and E = excellent.

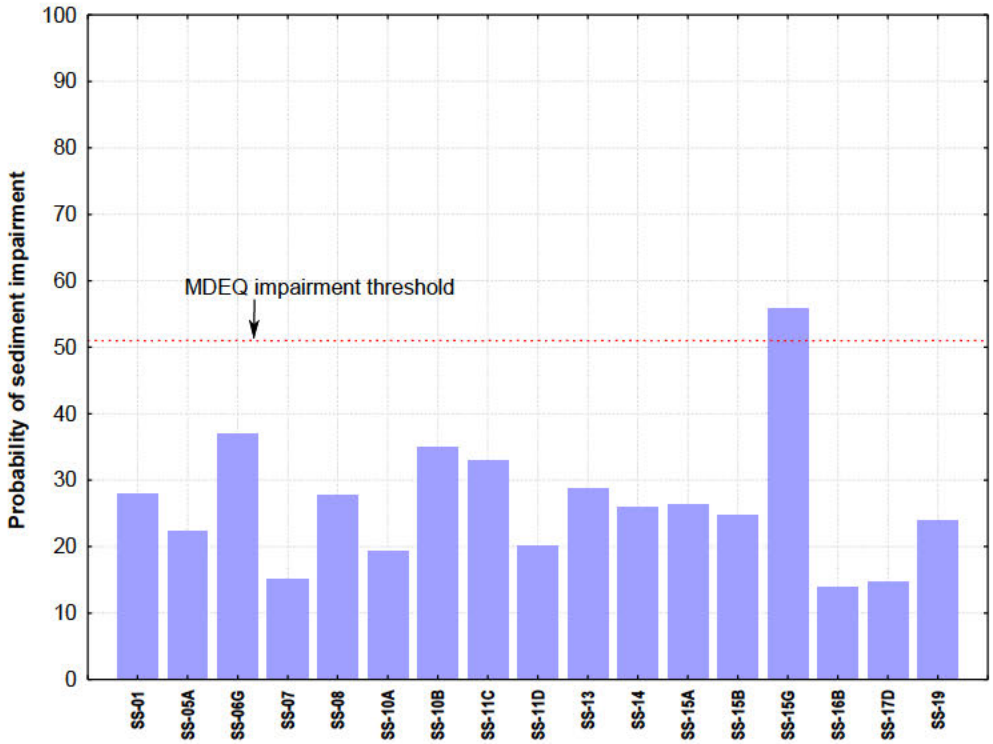

Figure 5-4. Sediment impairment probabilities based on abundances of sediment increaser diatom taxa [Teply, 2010]. The MDEQ threshold for classification as sediment-impaired is 51%, which is represented by the red dashed line. Silver Bow Creek watershed, September 9–11, 2014.

5.3.3 Ecological Interpretation of Aquatic Assemblages

5.3.3.1 SS-01: Blacktail Creek at Father Sheehan Park

MVFP bioassessment scores [Figure 5-5] varied from year to year at Site SS-01: the 2014 score showed improvement compared to 2013, but scores from both years were lower than in previous years. Moderate impairment is indicated in 2014. According to McGuire's guidance, the MTI indicated slight impairment from metals in every year since 2010, and the HBI indicated mild-to-moderate nutrient enrichment [Figure 5-6].

Metric indicators of water quality suggested impaired conditions at this site: the mayfly fauna was limited to two taxa, and the biotic index value (5.48) was higher than expected for a low-order Middle Rockies stream, indicating a tolerant invertebrate assemblage. Abundant naidid oligochaetes (*Nais* sp. and *Ophidonais serpentina*) and midges in the genus *Orthocladius* suggest that filamentous algae may be present: large crops of filamentous algae may be associated with nutrient enrichment. The thermal preference of the aquatic invertebrate assemblage was calculated at 14.7°C.

Neither "clingers" (10 taxa) nor caddisflies (three taxa) were as diverse as expected, suggesting habitat disruption related to sediment deposition. The FSBI value could not be reliably calculated, since most taxa in the sample did not have associated sediment tolerance

values. Overall taxa richness (39) was higher than any other site in this monitoring event, but much lower than expected for a minimally impaired, low-order stream in the Middle Rockies ecoregion. Low diversity may be related to severely impaired water quality or to limited instream habitats, or both. The absence of stoneflies in the sample collected here may be related to altered channel morphology, unstable streambanks, or disturbed riparian function. The site supported at least four semivoltine taxa: catastrophic dewatering or thermal extremes probably did not influence the composition of the assemblage. All expected functional groups were present, with gatherers dominating the mix.

Periphyton was dominated by diatoms, but the filamentous green algae genera *Cladophora* sp. and *Oedogonium* sp. were very common. Among diatoms, *Nitzschia inconspicua* was the most common taxon, accounting for 9.8% of the assemblage. Potapova and Charles [2007] identify this taxon as a strong indicator of elevated total nitrogen and/or total phosphorus in the western mountains. Other common taxa were *Fragilaria vaucheriae* and *Melosira varians*. High species richness (51) suggests a >50% probability of nutrient enrichment. The comparatively high value (4.77) for Shannon diversity suggests that impairment by nutrients may be moderate [Teply and Bahls, 2005]. Alkaliphilous taxa accounted for 82.5% of diatoms, suggesting that pH was higher than 7.0.

Stress from natural disturbances seems to have been inconsequential at this site: *Achnanthidium minutissimum*, an indicator of such stress, was not common. Motile taxa (31.2%) and siltation indicators (27.3%) were lower than the average abundance for samples in this investigation, and were consistent with those reported for "typical" mountain streams. The probability of sediment impairment was low (27.8%), and since it was below the MDEQ threshold value, the site would not be classified as sediment-impaired under current MDEQ criteria. Metals tolerant taxa accounted for 26.3% of diatoms: this was among the lowest incidence of these taxa at sites in this monitoring event, and is characteristic of a "typical" mountain stream.

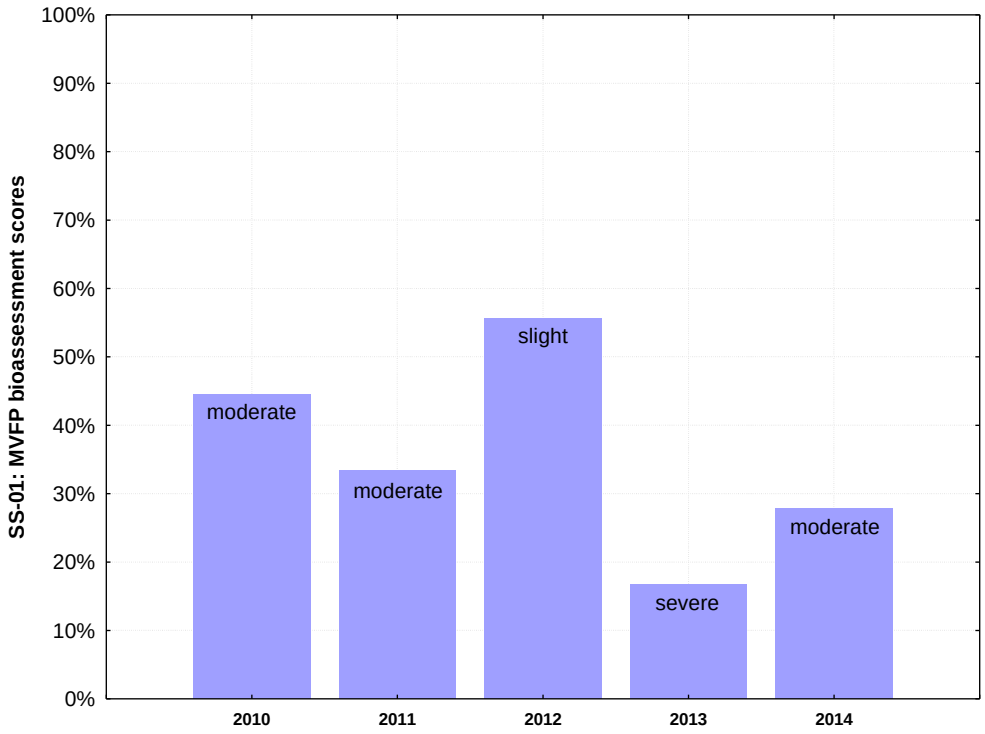

Figure 5-5. MVFP bioassessment scores: comparison among years for site SS-01. Bars are labeled with impairment classifications.

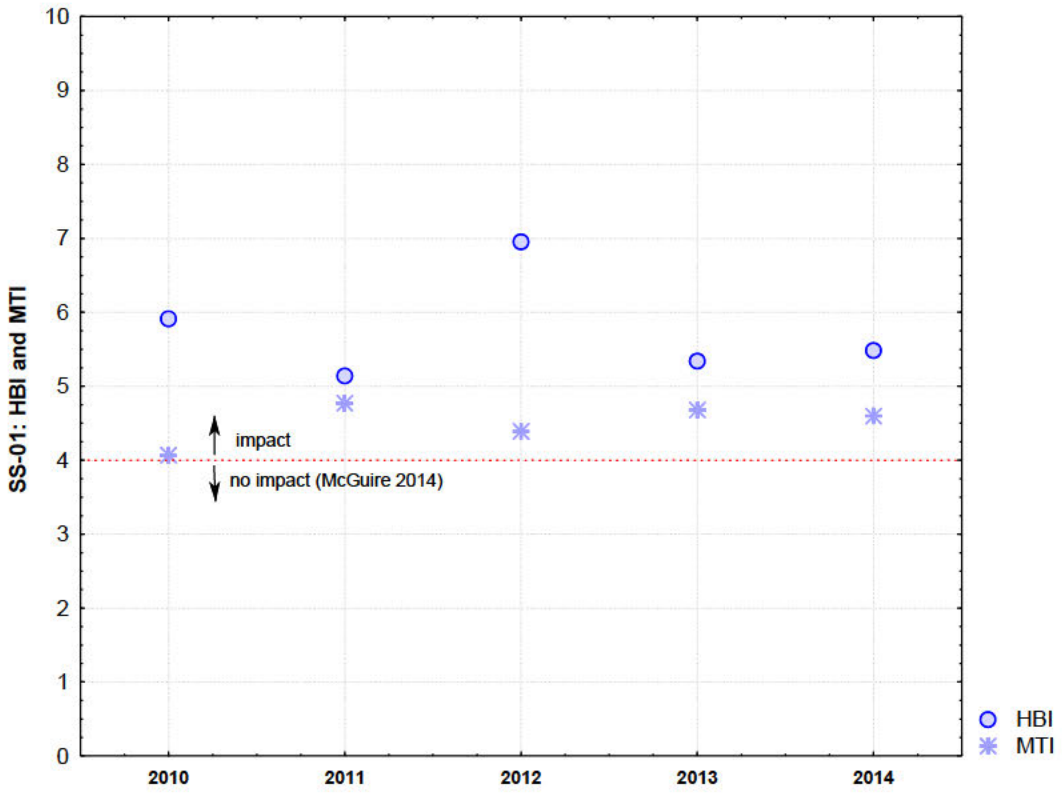

Figure 5-6. HBI and MTI values: comparison among years for site SS-01. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.2 SS-05A: Silver Bow Creek above Butte Reduction Works

MVFP bioassessment scores [Figure 5-7] indicated severe impairment at site SS-05 in 2014. The overall score was somewhat higher than in 2013, but severe impairment was indicated in that year as well, worsening from moderate impairment in 2012. According to McGuire's guidance, the MTI indicated slight impairment from metals in each year since 2012, and the HBI indicated mild-to-moderate nutrient enrichment over the same time period [Figure 5-8].

In the sample collected at this site in 2014, mayflies were represented by a single taxon, three immature specimens in the family Baetidae, and the biotic index value (5.78) was high, indicating a tolerant aquatic invertebrate assemblage. These findings suggest nutrient enrichment. The fauna was dominated by blackfly larvae (*Simulium* sp.), suggesting that fine organic particulates in suspension were the dominant energy source in the reach. The thermal preference for the assemblage was calculated at 16.2°C.

Four caddisfly taxa were counted in the sample, but none were common. "Clingers" were represented by seven taxa. These findings suggest that sediment deposition limited colonization of stony substrate habitats in the reach. The FSBI value could not be confidently calculated, since most taxa in the sample did not have associated sediment tolerance values. Overall taxa richness (25) was low, which may reflect monotonous or disrupted instream habitats, poor water quality, or both. The absence of stoneflies may be related to reach-scale disturbances: unstable

streambanks, loss of riparian function, or channel alteration are examples of such disturbances. Three non-pioneer semivoltine taxa were present, but none of these were abundant. Periodic scour, dewatering, thermal stress, or toxic pollutants may be influential. Filterers, especially *Simulium* sp., dominated the functional composition of the sample. Predators, especially the aquatic mite *Sperchon* sp. were also abundant. This imbalanced functional pattern suggests limited energy sources, which may have been largely limited to algal decomposition products suspended in the water column.

Periphyton at this site was dominated by diatoms, but the filamentous green alga *Cladophora* sp. was very common as well. The dominant diatom taxa were *Nitzschia palea* (20.0%), followed by *Fistulifera saprophila* (15.5%) and *Staurosira construens v. venter* (12.0%). Potapova and Charles [2007] identify *N. palea* as a strong indicator of elevated nitrogen and/or phosphorus in western mountain streams. Species richness (37) was consistent with expectations for a low-order stream, but the low value for Shannon diversity (3.99), which is, in this case, related to the dominance of the three most common taxa, is consistent with impairment [Teply and Bahls, 2005]. Circumneutral pH is suggested by the moderate abundance of alkaliphilous taxa (47.7%) and the absence of acidophilous taxa.

Natural stress was probably not influential at this site, since the low abundance of the disturbance indicator taxon (2.5%) suggests a well-developed algal assemblage. Motile taxa (42.3%) and siltation indicators (54.8%) were more abundant than expected, and suggest the influence of sediment deposition on the assemblage. However, the sediment impairment probability (22.4%) was below the MDEQ threshold; thus, the site would not be classified as sediment-impaired under current MDEQ criteria. Impairment due to metals contamination was indicated by the elevated abundance of metals-tolerant taxa (43.2%).

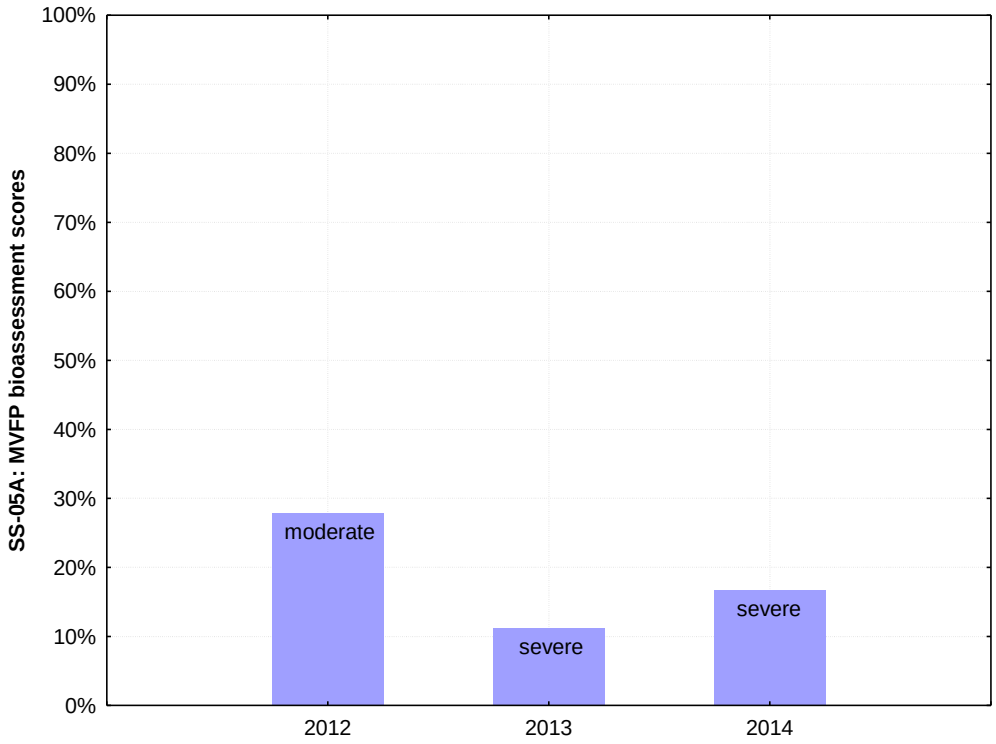

Figure 5-7. MVFP bioassessment scores: comparison among years for site SS-05A. Bars are labeled with impairment classifications.

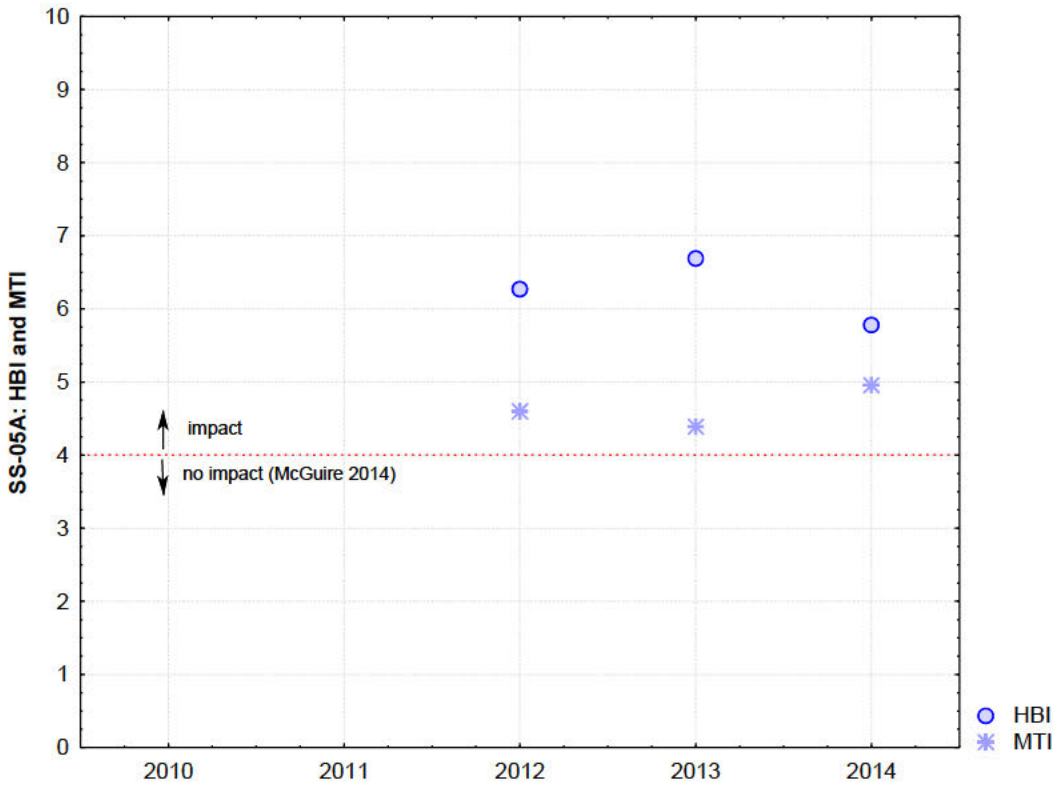

Figure 5-8. HBI and MTI values: comparison among years for site SS-05A. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.3 SS-06G: Silver Bow Creek above Butte WWTP

Similar to recent years, severe impairment was indicated by MVFP bioassessment scores [Figure 5-9] at site SS-06G in 2014. According to McGuire's guidance, the MTI indicated slight impairment from metals in each year since 2012, and the HBI indicated mild-to-moderate nutrient enrichment since 2010 [Figure 5-10].

A few specimens of a single taxon, the ubiquitous *Baetis tricaudatus*, represented mayflies at this site, and the high HBI value (5.05) indicated a tolerant aquatic invertebrate assemblage. Nutrient enrichment may have impaired water quality in the reach. The fauna was dominated by the net-spinning caddisfly *Hydropsyche* sp., which accounted for 39.1% of sampled organisms. It seems likely that fine organic particulate matter, probably a result of algal decomposition in upstream reaches, was the dominant energy source here. The metals tolerance index value (5.03) was nearly the same as the biotic index value. Since neither heptageniid mayflies nor other metals-sensitive invertebrates were present in the sample, metals contamination cannot be ruled out. The thermal preference of the assemblage was 17.2°C.

Very poor representation of both caddisflies (2 taxa) and "clingers" (5 taxa) strongly suggest that sediment deposition limited colonization of stony substrates. The FSBI value could not be confidently calculated, since most taxa in the sample did not have associated sediment tolerance values. Overall taxa richness (21) was much lower than expected: low diversity may be related

to poor water quality, disrupted instream habitats, or both. Similar to many other Silver Bow Creek sites, no stoneflies seem to be supported here. The absence of stoneflies may be related to reach-scale habitat disturbances: altered channel morphology, unstable streambanks, or disrupted riparian function may be indicated. Three semivoltine taxa were collected, and two of these were common. It seems unlikely that thermal extremes or scour prevented the completion of long life cycles here. The functional composition of the sample was dominated by filterers, especially *Hydropsyche* sp. Shredders were virtually absent, suggesting limited inputs of large leafy or woody debris from riparian sources. Scrapers were common, indicating well-developed algal films which may have benefited from a lack of channel shading.

Diatoms dominated the periphyton sample collected at this site, but the filamentous green alga *Cladophora* sp. was common as well. *Staurosira construens v. venter* (20.3%) dominated the diatom assemblage, followed by *Pseudostaurosira brevistriata* (8.7%) and *Diatoma vulgaris* (6.5%). A high probability of nutrient impairment was indicated by the species richness (55), which was greater than expected for a montane stream. Shannon diversity (4.63) was also somewhat higher than expected, owing to the abundance of the dominant taxon. Impairment was likely moderate. High pH is suggested by the frequency of alkaliphilous diatoms, which accounted for 83.2% of identified valves.

An established and well-developed biofilm is suggested by the very low occurrence of the disturbance indicator taxon, *Achnanthidium minutissimum*. Motile taxa (28.0%) and siltation indicators (25.7%) occurred at frequencies similar to those of a "typical" mountain stream. The sediment impairment probability (37.0%) fell below the MDEQ threshold for impairment: the site would not be classified as impaired by sediment under current MDEQ criteria. Metals-tolerant taxa accounted for 21.2% of identified diatoms. This frequency is consistent with a "typical" mountain stream.

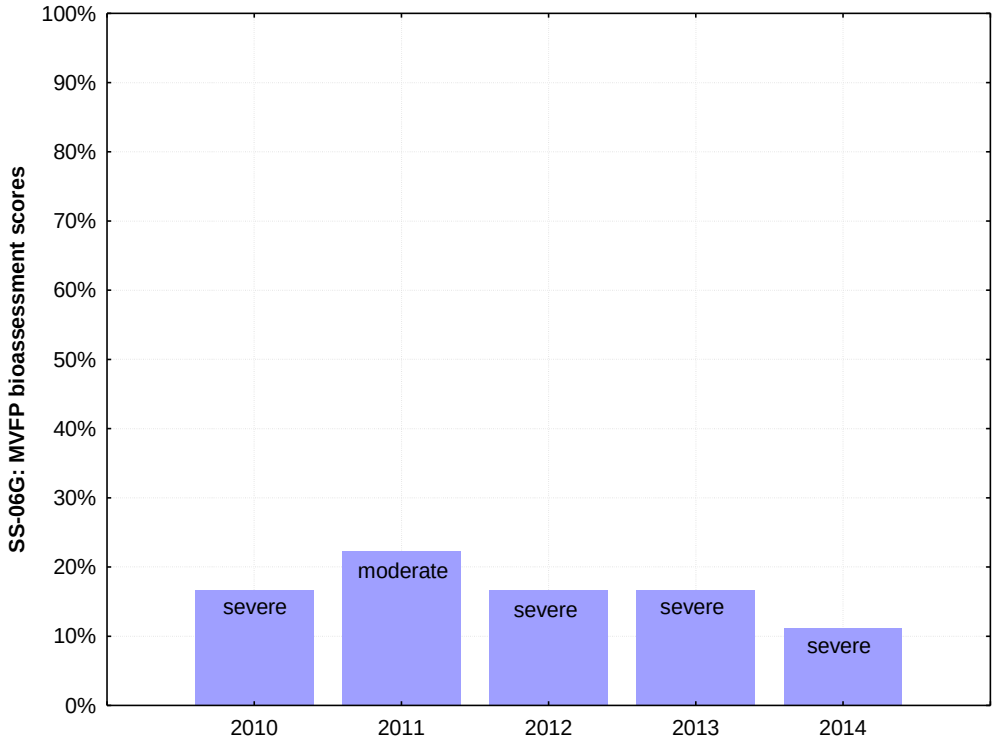

Figure 5-9. MVFP bioassessment scores: comparison among years for site SS-06G. Bars are labeled with impairment classifications.

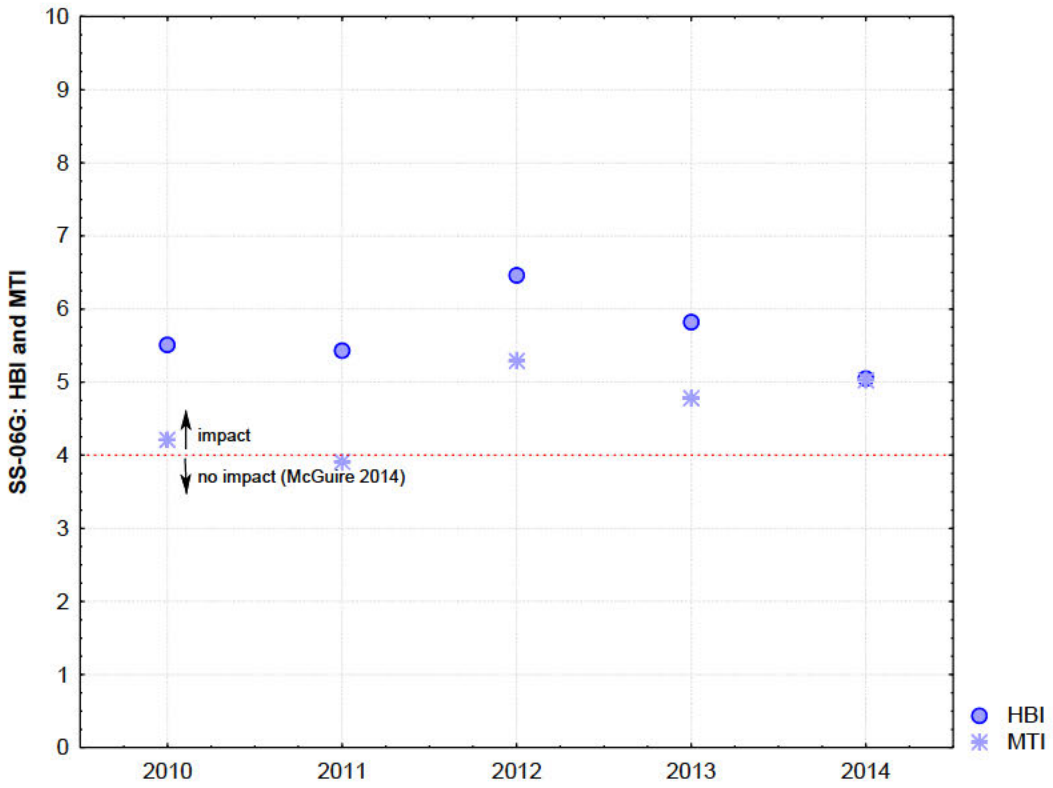

Figure 5-10. HBI and MTI values: comparison among years for site SS-06G. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.4 SS-07: Silver Bow Creek below Butte WWTP

Site SS-07 remained severely impaired in 2014, as measured by the MVFP bioassessment index. Scores since 2010 at this site are graphed in Figure 5-11. According to McGuire's guidance, the MTI indicated slight impairment from metals in each year since 2012, and the HBI indicated mild-to-moderate nutrient enrichment since 2010 [Figure 5-12].

The mayfly fauna at this site was limited to very few specimens of a single taxon, and the biotic index value (7.25) indicated a very tolerant assemblage. Impaired water quality, likely due to nutrient enrichment, is strongly suggested by these findings. The dominant taxon was the hemoglobin-bearing midge *Chironomus* sp., which accounted for 25% of sampled animals. Hypoxic sediments likely characterized the site, suggesting high biological oxygen demand. Warm water temperatures may also have contributed to hypoxic conditions, since several warm-water preferring taxa were present, including the leeches *Helobdella stagnalis* and *Erpobdella* sp., and the snails *Stagnicola* sp. and *Gyraulus* sp. Abundant naidid oligochaetes (*Nais* sp.) suggest that filamentous algae may have been present. The thermal preference of the assemblage was calculated at 16.5C.

Caddisflies (2 taxa) and "clingers" (10 taxa) were significantly underrepresented in the collected fauna, suggesting sediment deposition. The FSBI value could not be confidently calculated, since most taxa in the sample did not have associated sediment tolerance values.

Overall taxa richness (34) was lower than expected for a Middle Rockies stream, and may have been limited by water quality problems or disrupted instream habitats. The lack of stoneflies may be related to reach-scale habitat disruption, poor water quality, or both. Three semivoltine taxa were counted, making it seem unlikely that catastrophic events such as thermal extremes or scour were influential. The functional composition of the invertebrate assemblage was dominated by gatherers, especially *Chironomus* sp. and the naidid worm *Nais* sp. Although all other expected feeding groups were present, the dominance of these two tolerant taxa suggests a nutrient-enriched environment.

The periphyton sample collected at this site was dominated by diatoms, but the filamentous green algae genera *Oedogonium* sp. and *Microspora* sp. were also very common. Among the diatoms, *Sellaphora seminulum* strongly dominated the assemblage, accounting for 44.3% of identified valves. This taxon was identified by Potapova and Charles [2007] as a strong indicator of elevated nitrogen and/or phosphorus concentrations. Low-oxygen indicators were very abundant: 75.5% of diatoms were in this group. Although species richness (25) was appropriately low, the Shannon diversity value (2.72), reflecting the abundance of the dominant taxon, was very low. These findings suggest that nutrient enrichment and hypoxic conditions were influential in this reach. Circumneutral pH is suggested by the moderate abundance of alkaliphilous taxa.

The algal assemblage appeared to be stable and well-established, judging by the absence of the disturbance indicator taxon. Motile taxa (81.3%) and siltation indicators (81.8%) suggested stress from sediment deposition, but the probability of impairment was calculated at 15.0%, so the site would not be classified as impaired under current MDEQ criteria. Ninety percent of identified diatoms were metals-tolerant taxa: contamination by metals is indicated. The substantial increase in metals tolerant taxa between site SS-06G and site SS-07 in 2014 is notable.

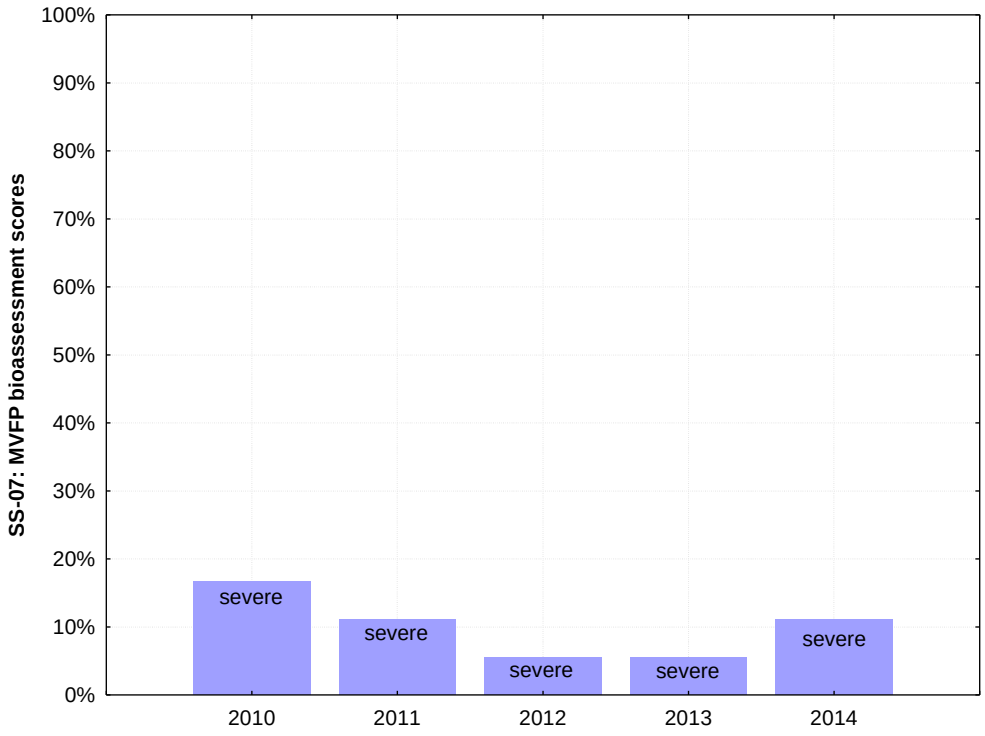

Figure 5-11. MVFP bioassessment scores: comparison among years for site SS-07. Bars are labeled with impairment classifications.

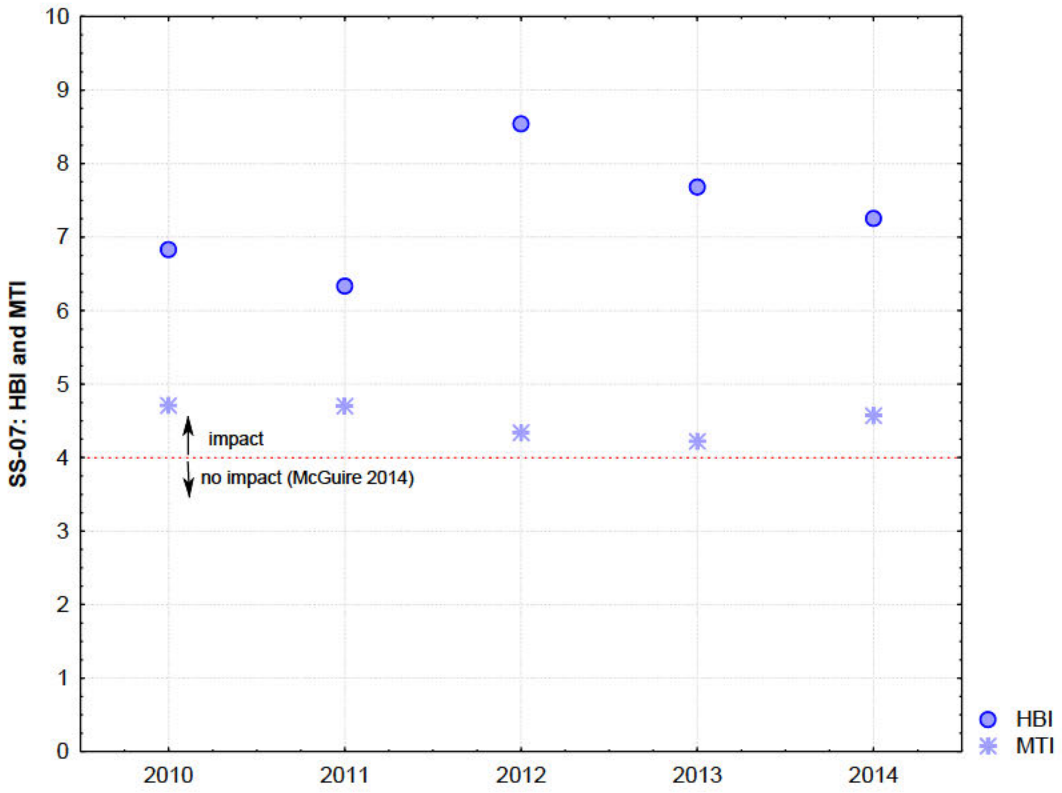

Figure 5-12. HBI and MTI values: comparison among years for site SS-07. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.5 SS-08: Silver Bow Creek at Rocker

Moderate impairment was measured by the MVFP index at site SS-08 in 2014: this represents an improvement from severe impairment in 2013 [Figure 5-13]. According to McGuire's guidance, the MTI indicated no impairment from metals in 2014, and the HBI indicated mild-to-moderate nutrient enrichment since 2010. HBI and MTI scores are graphed in Figure 5-14.

Metric indicators of water quality suggest poor conditions at this site: not a single mayfly was present in the sample, and the biotic index value (6.35) was much higher than expected. The presence of filamentous algae is suggested by the abundance of naidid worms (*Nais* sp., *Ophidonais serpentina*, *Slavina appendiculata*) and by the composition of the chironomid fauna, which was dominated by the tanytarsine *Micropsectra* sp. Large crops of filamentous algae may be associated with nutrient enrichment. The leeches *Erpobdella* sp. and *Helobdella stagnalis* suggest warmer-than-expected water temperatures. The thermal preference of the assemblage was 17.0°C.

Caddisflies were absent from the sample, and only six "clinger" taxa were counted. Sediment deposition may have limited colonization of stony substrate habitats in this reach. The FSBI value could not be reliably calculated, since very few taxa in the sample have associated sediment tolerance values. Low overall taxa richness (29) may be related to poor water quality

or disrupted habitats, or both. Similar to most other Silver Bow Creek sites, stoneflies were absent, suggesting reach-scale habitat disturbances. Impaired water quality may also have prevented colonization of stoneflies. Two semivoltine taxa were collected, but neither taxon was common. Catastrophes such as toxic pollutants, dewatering, scouring sediment pulses, or thermal extremes cannot be ruled out here. Gatherers, mostly naidid oligochaetes and midges, overwhelmed the functional composition of the invertebrate fauna. Other expected functional groups were poorly represented in the mix. This pattern is sometimes interpreted as evidence of water quality impairment.

The filamentous green alga *Cladophora* sp. dominated the periphyton sample collected at this site. However, diatoms were very abundant, and *Oedogonium* sp., another filamentous chlorophyte, was very common. *Eolimna minima* was the most common diatom, accounting for 28.9% of that assemblage. *Sellaphora seminulum* (10.5%) and *Mayamaea atomus* (9.6%) were the next most abundant taxa. Taxa richness (26) was within expectations for a mountain stream, but the high abundance of the dominant taxon, combined with the low value for Shannon diversity (3.58), suggests stress from nutrient enrichment. The high proportion of low-oxygen indicators (52.5%) supports this hypothesis. One of the dominant taxa, *S. seminulum*, was determined to be a strong indicator of nutrient enrichment [Potapova and Charles, 2007]. Alkaliphilous taxa accounted for 70.0% of diatoms, indicating a pH value higher than 7.0.

Very few specimens of *Achnanthidium minutissimum* were counted, indicating stable, well-established algal films. High abundance of both siltation indicators (67.8%) and motile forms (68.4%) suggest that sediment deposition influenced the composition of the diatom flora here. However, the current MDEQ evaluation would not classify this site as sediment-impaired: the probability for sediment impairment was only 27.8%. Most of the diatoms (70.9%) sampled at this site were metals-tolerant taxa: the probability of metals contamination at this site was high.

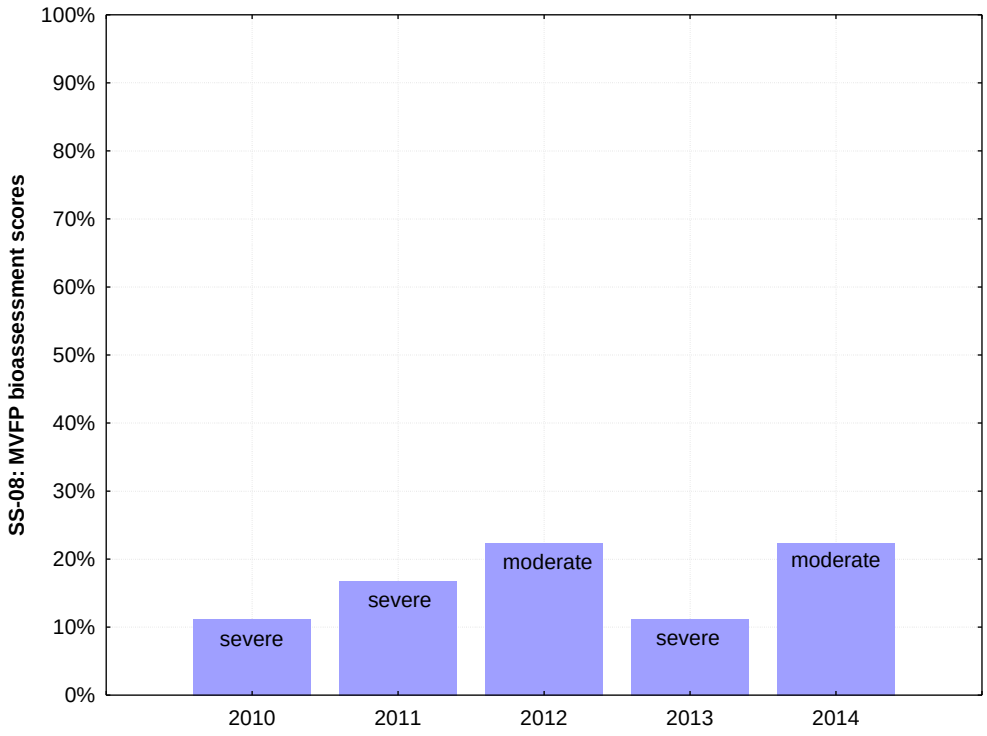

Figure 5-13. MVFP bioassessment scores: comparison among years for site SS-08. Bars are labeled with impairment classifications.

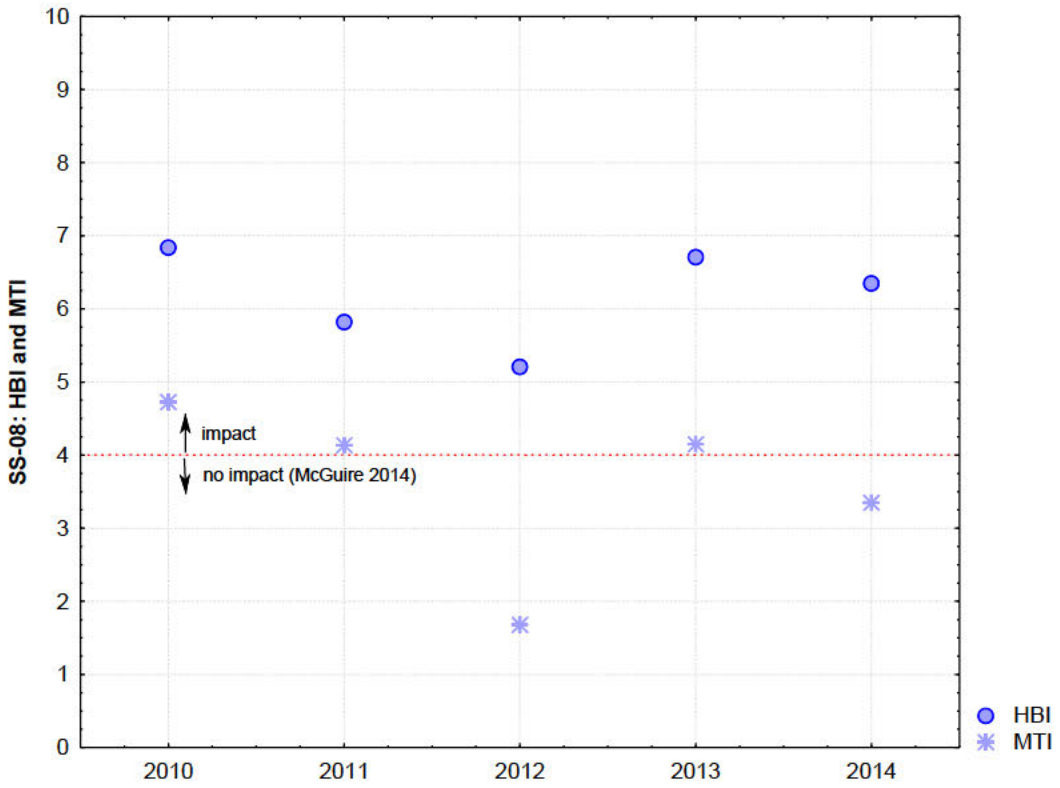

Figure 5-14. HBI and MTI values: comparison among years for site SS-08. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.6 SS-10A: Silver Bow Creek above Sand Creek

MVFP scores exhibited slight improvement each year from 2012 to 2014: moderate impairment is indicated by these scores in 2014 [Figure 5-15]. According to McGuire's guidance, the MTI indicated no impairment from metals in 2014, and the HBI indicated mild-to-moderate nutrient enrichment since 2010 [Figure 5-16].

A single mayfly specimen, in the *Baetis Rhodani* Group, was collected at this site, and the biotic index value (6.66) indicated a very tolerant invertebrate assemblage. Nutrient enrichment and warmer-than-expected water temperatures may be indicated. Non-insect groups dominated the taxonomic composition of the fauna, but the tolerant caddisfly *Cheumatopsyche* sp. was abundant. This net-spinner primarily feeds on suspended bacteria. Warm-water preferring invertebrates present here included the caddisflies *Helicopsyche* sp. and *Oecetis* sp., and immature planorbid snails and the lymnaeid *Stagnicola* sp. The thermal preference of the assemblage was calculated at 18.5°C.

Four caddisfly taxa and 10 "clinger" taxa were collected: in both cases, diversity was much lower than expected for a low-to-mid order Middle Rockies stream. Sediment deposition may have limited the composition of the invertebrate assemblage. The FSBI value could not be confidently calculated, since most taxa in the sample did not have associated sediment tolerance values.

Although overall taxa richness (36) was higher than most Silver Bow Creek sites, it was much lower than expected. Poor water quality and/or disrupted instream habitats may have contributed to low invertebrate diversity. The absence of stoneflies may be related to water quality problems, or to reach-scale habitat disturbances, or both. Although 2 semivoltine taxa were present, neither was represented by more than a few specimens. Periodic thermal extremes, scour, dewatering, or toxic pollutants cannot be ruled out. The functional composition of the invertebrate assemblage was strongly dominated by predators, especially the tolerant *Hygobates* sp. and the slightly less tolerant *Sperchon* sp. Dominance by non-insect predators is sometimes interpreted as evidence for limited and unbalanced energy resources, which may confine the functional mix to smaller-than-expected numbers of gatherers and filterers. The early instars of these groups support a large population of predatory invertebrates, such as the mites.

Diatoms dominated the periphyton collection here, but the filamentous chlorophytes *Cladophora* sp. and *Stigeoclonium* sp. were also very common. Among diatoms, *Mayamaea atomus* was the most abundant taxon, accounting for 32.0% of identified cells. *Nitzschia inconspicua* (20.7%) was also abundant. Both of these taxa were identified by Potapova and Charles [2007] as strong indicators of nitrogen and/or phosphorus enrichment. Low species richness (29) is consistent with expectations for a Middle Rockies stream, but the low Shannon diversity value (3.29), which reflects the high proportion of the dominant taxa, suggests nutrient impairment. A pH value greater than 7.0 is implied by the high proportion of alkaliphilous taxa, which accounted for 86.0% of sampled diatoms.

No specimens of *Achnanthidium minutissimum* were counted in the sample: a stable, well-established biofilm is indicated. Motile diatoms (78.3%) and siltation indicators (78.0%) were much more abundant than expected, suggesting that sediment deposition stressed the assemblage. However, the probability of sediment impairment, calculated using current MDEQ criteria was only 19.2%: the site would not be classified as sediment impaired. Metals contamination was very likely at this site: 56.5% of diatoms were metals tolerant taxa.

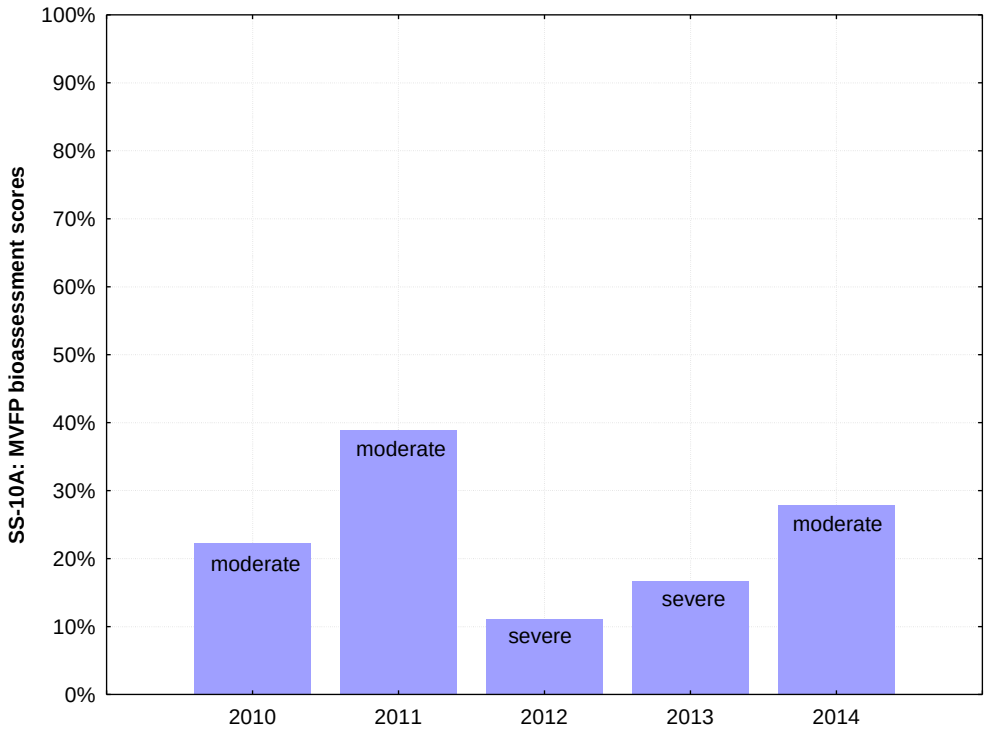

Figure 5-15. MVFP bioassessment scores: comparison among years for site SS-10A. Bars are labeled with impairment classifications.

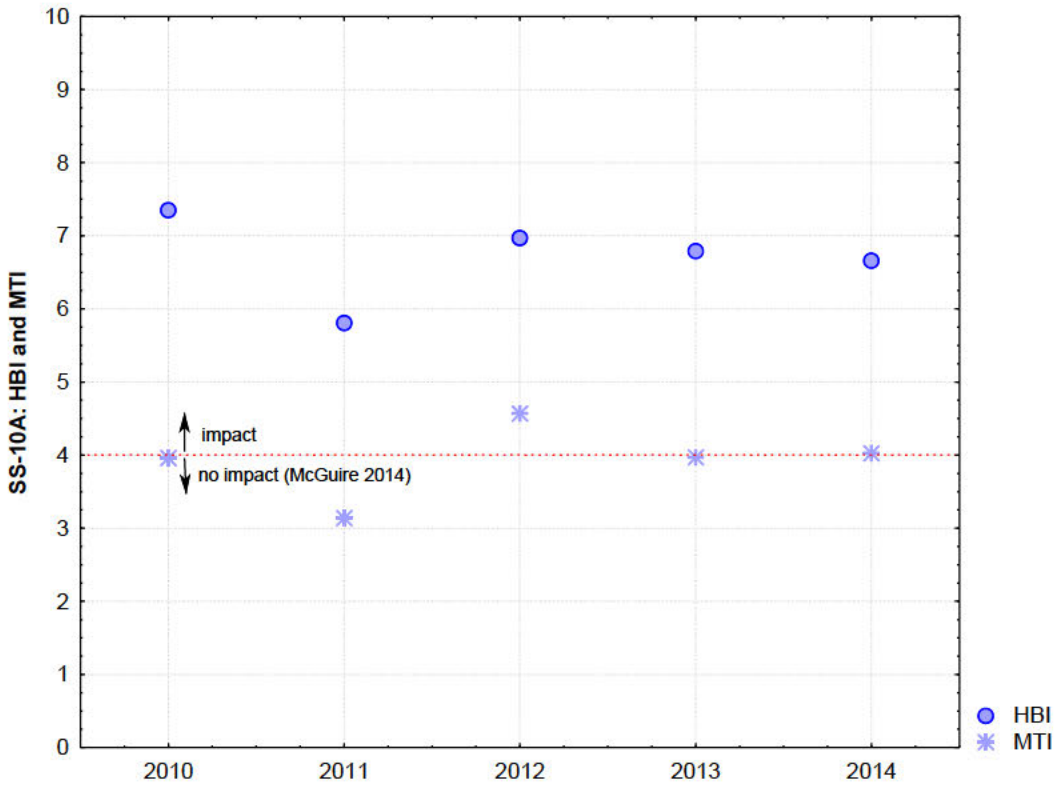

Figure 5-16. HBI and MTI values: comparison among years for site SS-10A. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.7 SS-10B: Silver Bow Creek below Sand Creek

Moderate impairment is indicated by MVFP bioassessment scores in 2014, with no apparent trend in these scores between 2010 and 2014. MVFP scores are graphed in Figure 5-17. According to McGuire's guidance, the MTI indicated very slight impairment from metals in 2014, and the HBI indicated mild-to-moderate nutrient enrichment since 2010 [Figure 5-18].

Mayflies were rare in the sample collected at this site: two taxa were each represented by a single specimen. The biotic index value (6.88) indicated a very tolerant invertebrate assemblage. Impaired water quality is implied by these findings. Non-insect taxa were abundant: the dominant taxon identified were immature tubificid worms, which suggests nutrient enrichment and hypoxia. Among the other abundant taxa, the isopod *Caecidotea* sp., suggests warm water temperatures. The thermal preference of the assemblage was 17.2°C.

It seems likely that sediment deposition was a further stressor here: caddisfly taxa richness (2) and "clinger" richness (6) were both much lower than expected. The FSBI value (2.89) indicated a sediment-tolerant assemblage. Overall taxa richness (35) was high relative to other Silver Bow Creek sites, but low compared to minimally impaired streams in the Middle Rockies ecoregion. Similar to most other sites in this monitoring event, there were no stoneflies in the sample collected here: this may reflect disrupted reach-scale habitat features or poor water quality, or both. Semivoltine taxa were poorly represented: two taxa were counted, with a single

specimen of each. Catastrophes such as dewatering, toxic pollution, thermal extremes, or scouring sediment pulses cannot be ruled out. Gatherers and filterers dominated the functional composition of the assemblage. This pattern is sometimes interpreted as evidence of impaired water quality.

The periphyton assemblage was dominated by diatoms, but filamentous green algae (*Cladophora* sp. and *Stigeoclonium* sp.) were also very common. Dominant diatom taxa, in order of abundance, were *Eolimna minima* (11.5%) and *Nitzschia inconspicua* (11.5%). Species richness (37) was appropriate for a montane stream, and the Shannon diversity value (4.37) was consistent with the low abundance of the dominant taxa. These findings suggest that nutrient enrichment did not appreciably stress the flora in this reach. Alkaliphilous diatoms were very abundant, accounting for 85.5% of identified specimens. This suggests that pH was greater than 7.0.

Similar to all other sites in this monitoring event, biofilms here were probably stable and well-established, given the absence of the disturbance indicator taxon. Motile taxa (47.8%) and siltation indicators (46.7%) were not as abundant here as at many other sites during this monitoring event, but some influence of sediment deposition is suggested by these findings. However, the sediment probability (35.0%) calculated by means of the MDEQ protocol, did not exceed the impairment threshold; thus, this site would not be classified as sediment impaired under current MDEQ criteria. Metals contamination is indicated by abundant metals tolerant taxa: 34.3% of diatoms fit this classification. It is notable that the proportion of metals tolerant taxa is somewhat lower here than at sites immediately upstream (SS-07, SS-08, and SS-10A).

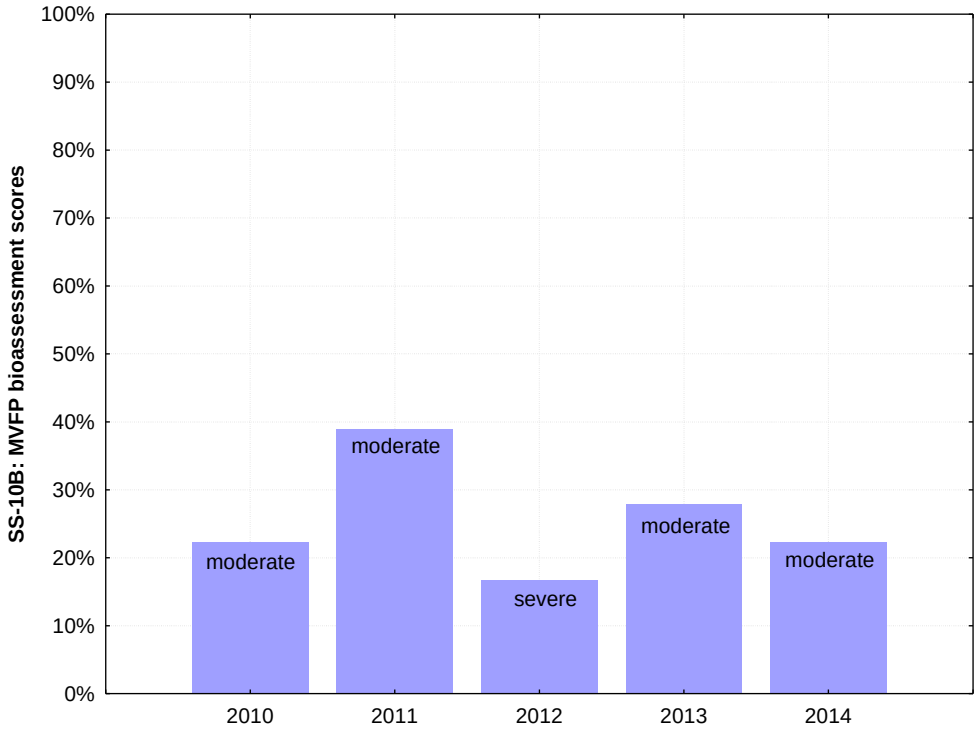

Figure 5-17. MVFP bioassessment scores: comparison among years for site SS-10B. Bars are labeled with impairment classifications.

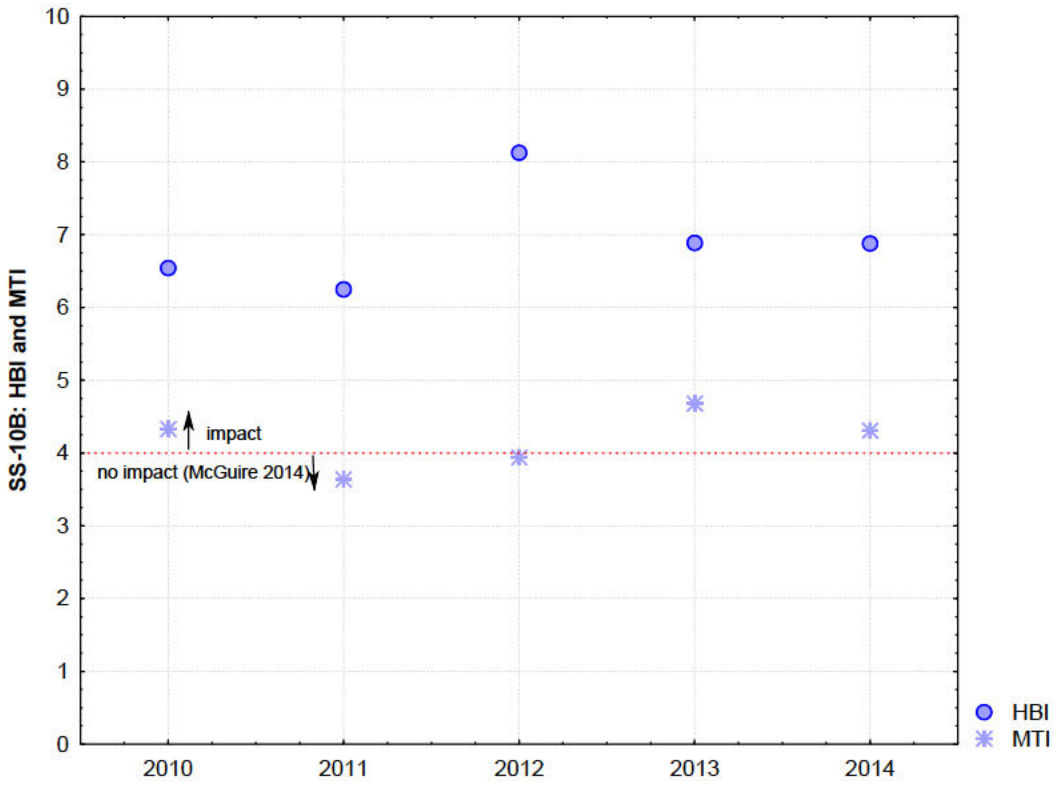

Figure 5-18. HBI and MTI values: comparison among years for site SS-10B. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.8 SS-11C: Silver Bow Creek above Browns Gulch

MVFP bioassessment scores [Figure 5-19] worsened at site SS-11C since 2013, indicating severe impairment in 2014. According to McGuire's guidance, the MTI indicated no impairment from metals in 2014, and the HBI indicated mild-to-moderate nutrient enrichment since 2010 [Figure 5-20].

Not a single mayfly was encountered in the sample collected above Browns Gulch. The biotic index value (5.63) indicated a tolerant invertebrate assemblage, which was likely influenced by nutrient enrichment and warm water temperatures. The dominant taxa included the net-spinning caddisflies *Hydropsyche* sp. and *Cheumatopsyche* sp., which suggests that organic material as fine particulates and bacteria in suspension were an important energy source in the reach. This suggests that senescent crops of algae upstream were a source of material supporting this assemblage. Warm water is suggested by the presence of leeches (*Erpobdella* sp.) and snails (*Physella* sp. and *Stagnicola* sp.) as well as by the caddisfly *Helicopsyche* sp. and an aquatic moth larva in the family Crambidae. The thermal preference of the assemblage was calculated at 17.8 °C.

Although six caddisfly taxa were counted, only three of these are associated with benthic substrates. "Clingers" were represented by only 10 taxa. It seems likely that stony substrates were contaminated with deposited sediment in this reach. The FSBI value could not be

confidently calculated, since most taxa in the sample did not have associated sediment tolerance values. Overall taxa richness (25) was low, and may reflect a dearth of instream habitats. No stoneflies were collected, suggesting reach-scale habitat disruption: unstable streambanks, loss of riparian zone integrity, or alteration of natural channel morphology may be indicated. Two semivoltine taxa were counted, and neither of these was abundant. Scour, dewatering, toxic pollutants, thermal extremes or other severe events that would prevent the completion of long life cycles cannot be ruled out. Similar to a few other Silver Bow Creek sites, this site supported a large population of tolerant predatory mites, including *Hygrobates* sp. and *Sperchon* sp., suggesting limited sources of energy in the reach. Filterers were abundant, indicating a steady supply of organic particulates. Algal films may also have been important, since the scraper *Helicopsyche* sp. was very abundant here.

Diatoms were the most abundant periphyton group at this site, but the filamentous chlorophyte *Oedogonium* sp. was also very common. *Nitzschia amphibia*, recognized as a strong indicator of high nitrogen and/or phosphorus concentrations [Potapova and Charles, 2007], was the dominant diatom, accounting for 17.7% of identified specimens. The next most abundant taxon was *Encyonema silesiacum* (11.7%). Both species richness (35) and the Shannon diversity index value (4.19) were consistent with an assemblage relatively unstressed by nutrient enrichment. The proportional representation of the dominant taxon was fairly low, supporting this hypothesis. High pH (i.e. > 7.0) is suggested by the dominance of alkaliphilous taxa, which accounted for 78.2% of the diatom flora.

A well-established algal film is indicated by the very low incidence of *Achnanthidium minutissimum*. Siltation indicators (46.7%) and motile diatoms (47.7%) were abundant enough to suggest that sediment deposition stressed the assemblage, but the sediment impairment probability, calculated using current MDEQ criteria (32.9%) would not have resulted in an impaired classification for this site. The influence of metals contamination was evident, as 36.0% of diatoms were tolerant types.

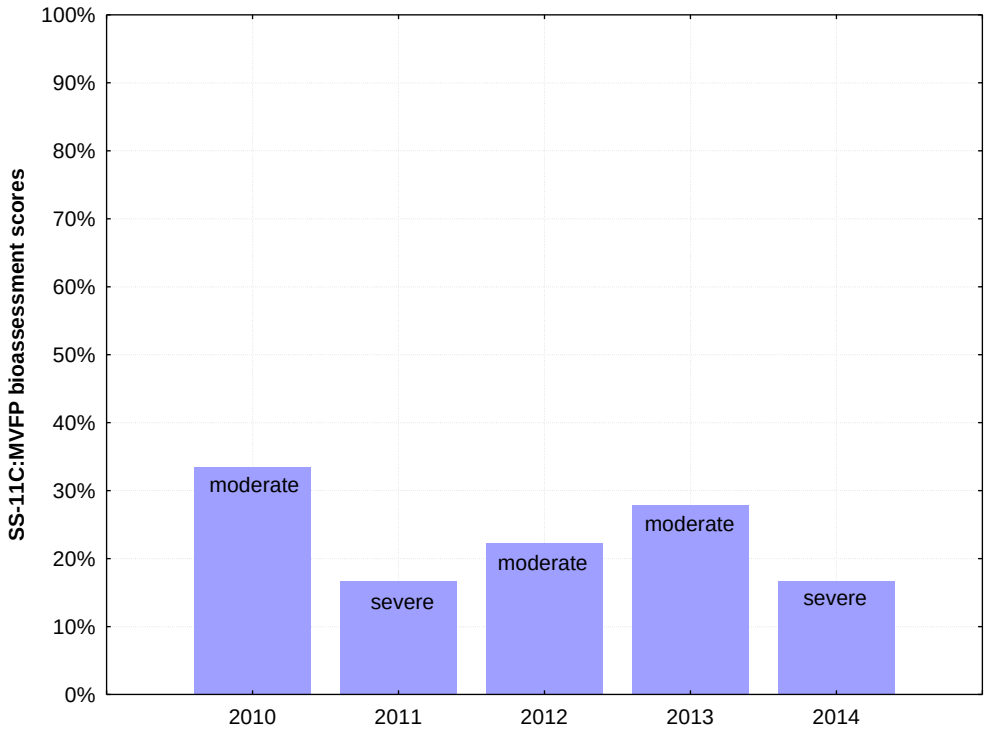

Figure 5-19. MVFP bioassessment scores: comparison among years for site SS-11C. Bars are labeled with impairment classifications.

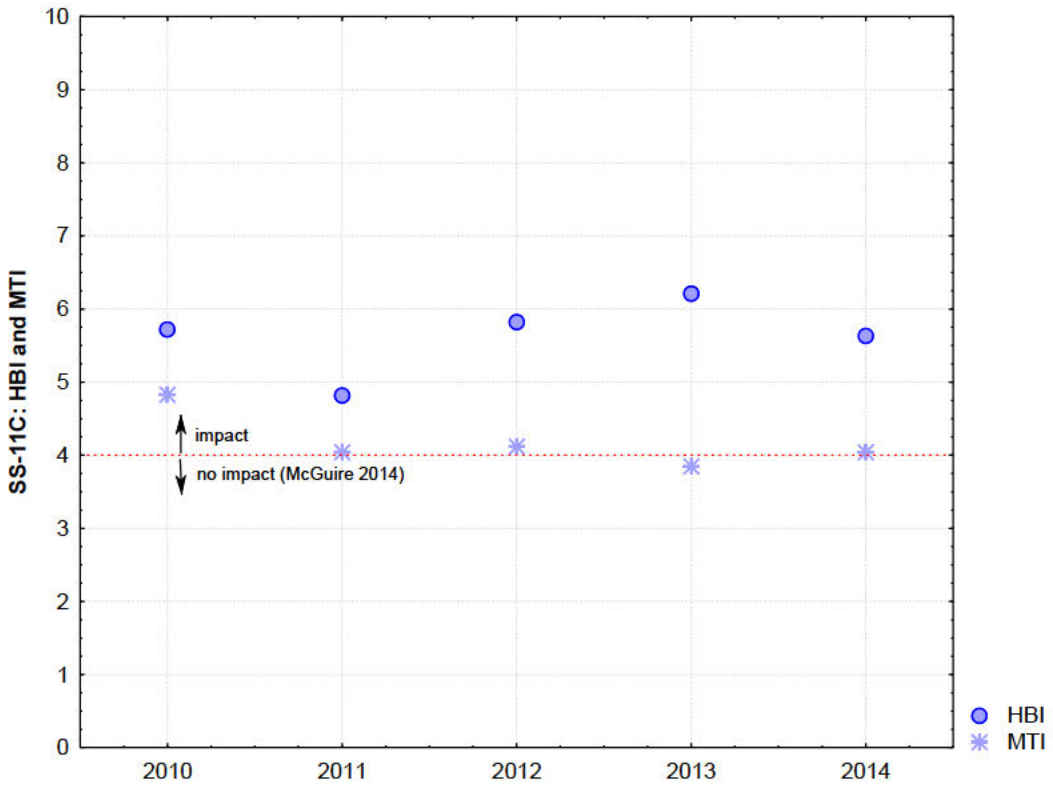

Figure 5-20. HBI and MTI values: comparison among years for site SS-11C. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.9 SS-11D: Silver Bow Creek below Browns Gulch

Moderate impairment has persisted at site SS-11D since 2010, as measured by the MVFP bioassessment index [Figure 5-21]. According to McGuire's guidance, the MTI indicated no evidence of impairment from metals in 2014, and the HBI indicated mild-to-moderate nutrient enrichment since 2010 [Figure 5-22].

Mayflies were represented by two specimens in two taxa at this site, and the biotic index value (5.98) indicated a very tolerant assemblage. Non-insects, including leeches (*Erpobdella* sp., *Helobdella stagnalis*), mites (*Hygrobates* sp., *Lebertia* sp., *Sperchon* sp.), isopods (*Caecidotea* sp.) and snails (*Physella* sp., immature planorbids) dominated the assemblage, suggesting warm water temperatures and nutrient enrichment. Nearly 5% of sampled organisms were hemoglobin-bearers, suggesting areas of hypoxic sediments. The thermal preference of the assemblage was 18.6°C.

Caddisflies (6 taxa) and "clingers" (12 taxa) were only slightly less diverse than expected, suggesting that sediment deposition may have been mild in the reach. The FSBI value could not be reliably calculated, since most taxa in the sample did not have associated sediment tolerance values. Overall taxa richness was relatively high, compared to most other Silver Bow Creek assemblages, but lower than expected for a low-to-mid order stream. The absence of stoneflies in the sample may be related to poor water quality, or to disruption of reach-scale habitat features

such as channel morphology, streambanks, or riparian zones. Semivoltine taxa were well-represented, making it seem likely that the reach did not recently experience scouring sediment pulses, dewatering, or thermal extremes. Scrapers, especially the caddisfly *Helicopsyche* sp., were the dominant functional group, suggesting ample algal films. Predators, filterers and gatherers were also abundant. The dearth of shredders suggests that large organic material such as leaves and woody debris from riparian sources was very limited or not retained in the reach.

Diatoms dominated the periphyton assemblage collected here. *Oedogonium* sp., a filamentous green alga, was abundant. The most abundant diatom taxa were: *Staurosira construens v. venter* (17.8%), *Nitzschia amphibia* (11.0%), and *Encyonema silesiacum* (10.7%). Among these dominant taxa, *N. amphibia* was identified by Potapova and Charles [2007] as a strong indicator of increased concentrations of nitrogen and/or phosphorus. Species richness (34) was within expectations for a montane stream. The Shannon diversity index value (4.15) reflected the relatively low abundance of the most dominant taxa, and a relatively even distribution of diatom taxa abundances. These findings suggest that nutrient enrichment was not a significant stressor in this reach. High pH (above 7.0) is indicated by the large proportion (81.5%) of alkaliphilous taxa.

Only 1.2% of diatoms were identified as *Achnanthidium minutissimum*, a taxon that indicates stress from substrate disturbances. It seems likely that the diatom flora was stable and well-established here. Impairment due to sediment deposition was not obvious from the current MDEQ sediment impairment probability, which was calculated at 20.0%. Using these criteria, this site would not be classified as sediment impaired. However, both motile diatoms (42.3%) and siltation indicators (41.3%) were somewhat more abundant than expected. Metals tolerant taxa were abundant, accounting for 34.0% of identified cells.

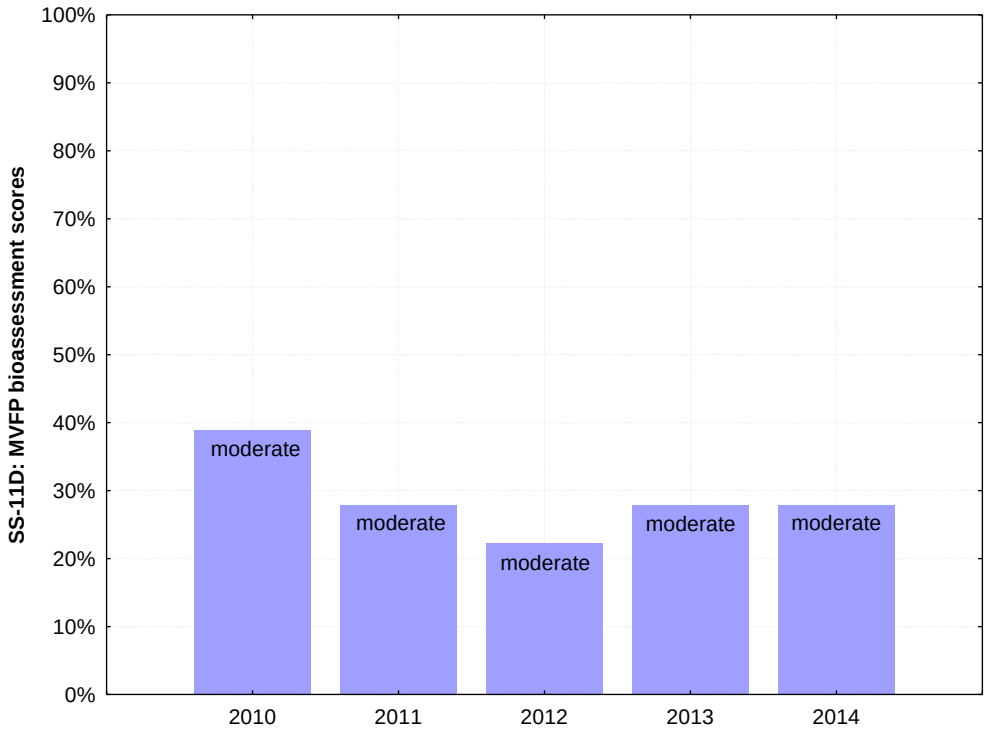

Figure 5-21. MVFP bioassessment scores: comparison among years for site SS-11D. Bars are labeled with impairment classifications.

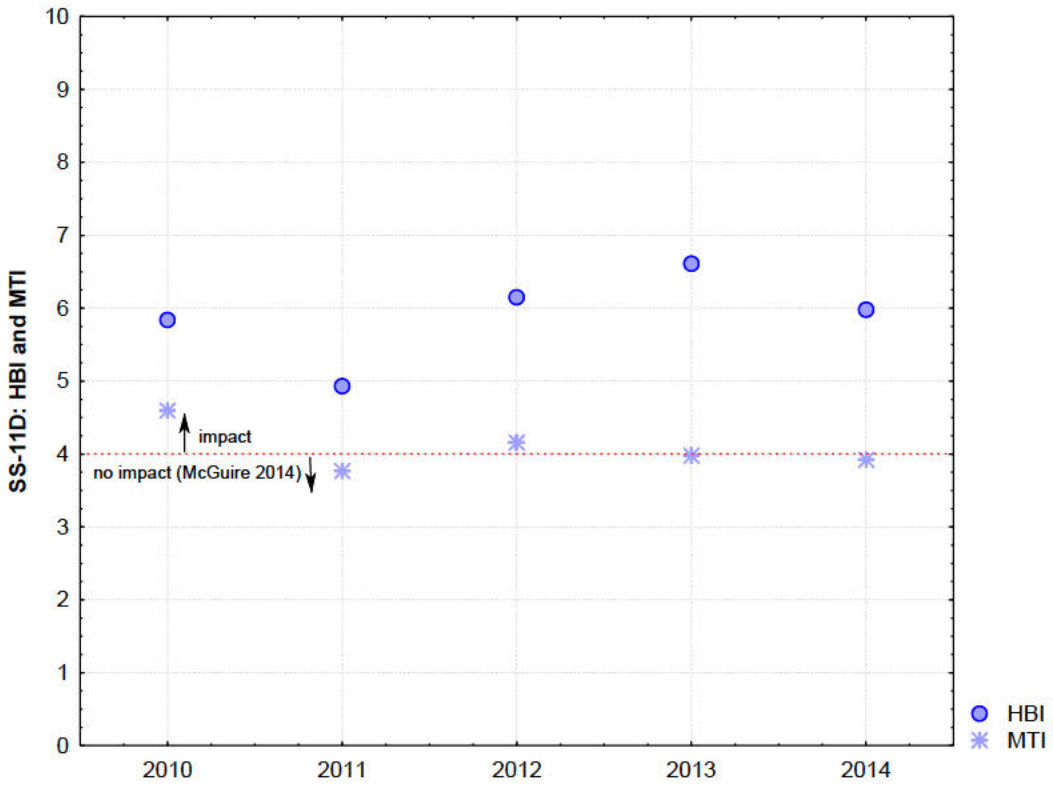

Figure 5-22. HBI and MTI values: comparison among years for site SS-11D. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.10 SS-13: Silver Bow Creek in Reach L

Site SS-13 was first sampled in 2013, and MVFP bioassessment index scores were the same in both years, indicating moderate impairment. Scores are graphed in Figure 5-23. According to McGuire's guidance, the MTI indicates no metals contamination in 2014, and the HBI indicates mild-to-moderate nutrient enrichment [Figure 5-24].

No mayflies were collected at this site, and the biotic index value (5.42) indicated a tolerant assemblage. The dominance of a relatively sensitive taxon, the caddisfly *Helicopsyche* sp., which accounted for 37% of sampled organisms, accounts for the relatively low biotic index value. *Helicopsyche* sp., along with several other taxa collected here (especially leeches, amphipods, and snails) suggests warm water temperatures. Nutrient enrichment may additionally stress the assemblage. More than 6% of invertebrates in the sample collected here were hemoglobin-bearers, suggesting hypoxic conditions. The thermal preference of the assemblage was calculated at 18.4°C.

Although seven caddisfly taxa were counted in the sample, the number of "clinger" taxa (8) was lower than expected, suggesting that colonization of stony substrates was limited by sediment deposition. The FSBI value could not be confidently calculated, since most taxa in the sample did not have associated sediment tolerance values. Overall taxa richness (29) was low, suggesting limited instream habitats or poor water quality. The absence of stoneflies may also

be related to poor water quality, but could also reflect disturbed reach-scale habitat features. Semivoltine taxa were poorly represented: catastrophes such as toxic pollutants, scour, dewatering, or thermal extremes cannot be ruled out. Scrapers, especially *Helicopsyche* sp., strongly dominated the functional composition of the assemblage, suggesting ample algal films.

The filamentous green alga *Oedogonium* sp. dominated the periphyton sample collected in Reach L: diatoms were also abundant. Among the diatoms, *Nitzschia amphibia* and *Nitzschia inconspicua*, which were identified by Potapova and Charles [2007] as indicators of nutrient enrichment, were the two most abundant species. The moderately high value for the Shannon diversity index (4.46) is consistent with the low proportional abundance of the dominant taxa. Along with the moderate species richness (39), the findings suggest that the influence of nutrient enrichment was mild. A high pH is suggested by the strong dominance of alkaliphilous taxa, which accounted for 84.8% of diatoms.

The absence of the disturbance indicator suggests that a stable, well-established biofilm characterized this site. Although the high proportion of motile diatoms (42.8%) and siltation indicators (42.0%) suggested stress from deposited sediment, the calculated probability of sediment impairment (28.7%) was low: the site would not be classified as sediment impaired under current MDEQ criteria. Metals tolerant taxa were abundant, accounting for 33.7% of identified cells. Metals contamination is indicated

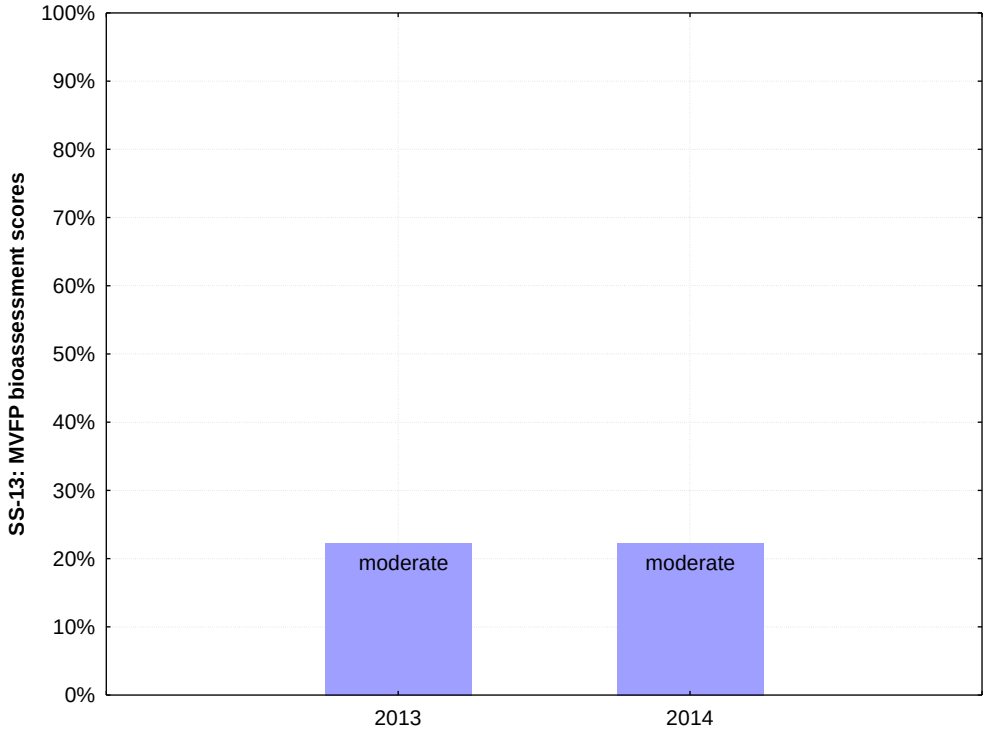

Figure 5-23. MVFP bioassessment scores: comparison among years for site SS-13. Bars are labeled with impairment classifications.

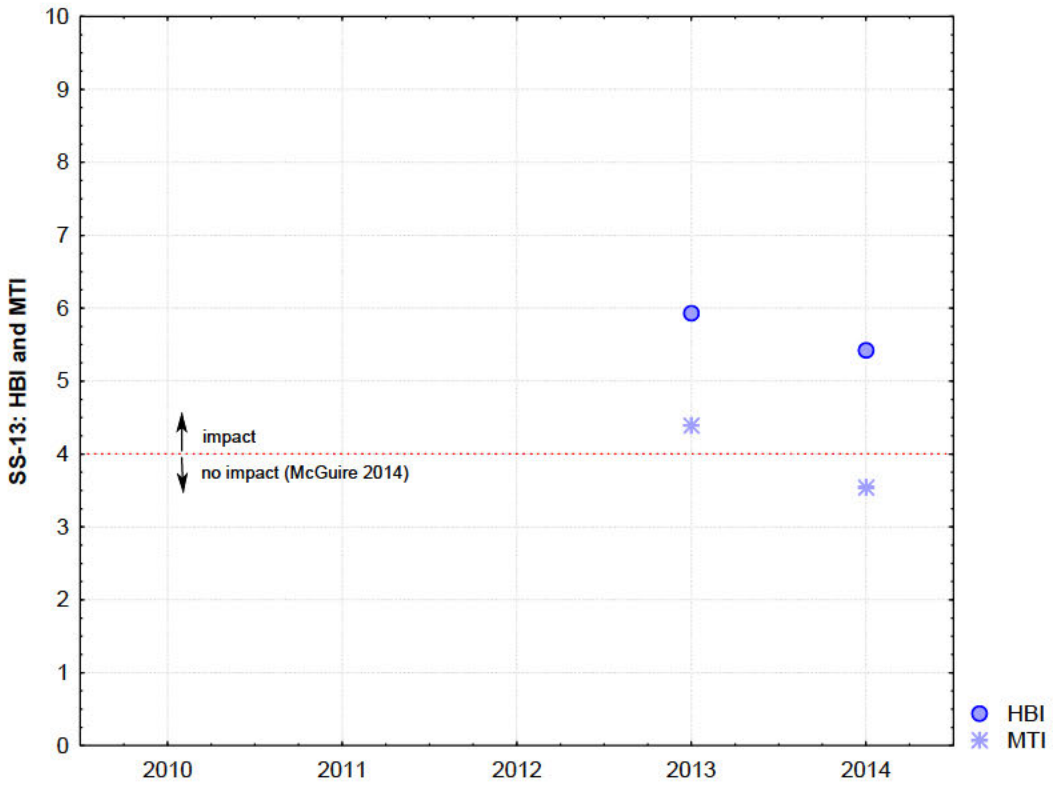

Figure 5-24. HBI and MTI values: comparison among years for site SS-13. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.11 SS-14: Silver Bow Creek at Miles Crossing

MVFP scores have consistently indicated moderate impairment at site SS-14 since 2010 [Figure 5-25]. According to McGuire's guidance, the MTI indicates no metals contamination in 2014, and the HBI indicates very slight-to-moderate nutrient enrichment [Figure 5-26].

Mayflies were absent from the sample collected at this site, suggesting that water quality was impaired here. The biotic index value (4.67), influenced by the dominance of the relatively sensitive caddisfly *Helicopsyche* sp., indicated a moderately tolerant assemblage. Leeches (*Erpobdella* sp.) and snails (*Physella* sp. and immature planorbids) suggested warm water temperatures and nutrient enrichment. The thermal preference of the assemblage was calculated at 18.7°C.

Neither "clingers" (8 taxa) nor caddisflies (5 taxa) were as diverse as expected, suggesting that colonization of stony substrates was inhibited by deposited sediment. The FSBI value could not be confidently calculated, since most taxa in the sample did not have associated sediment tolerance values. Very low overall taxa richness (22) may have been associated with water quality impairment or limited habitats, or both. A single stonefly specimen (*Skwala* sp.) was present in the collection. Low diversity in this group may reflect poor water quality or disrupted reach-scale habitat features, such as unstable streambanks, loss of riparian function, or altered channel morphology. Only one semivoltine taxon was counted. Catastrophes such as toxic

pollution, dewatering, sediment scour, dewatering, or thermal extremes cannot be ruled out. Scrapers, especially *Helicopsyche* sp., strongly dominated the functional mix. This suggests a lack of riparian shading and well-established algal films. Filterers were also abundant.

Oedogonium sp., a filamentous green alga, dominated the periphyton sample. Diatoms were abundant. *Mayamaea atomus* accounted for 14.0% of diatoms: the next most abundant taxa were *Nitzschia amphibia* (13.2%) and *Encyonema silesiacum* (10.3%). Of these dominant taxa, *M. atomus* and *N. amphibia* are strong indicators of nitrogen and/or phosphorus enrichment [Potapova and Charles, 2007]. Moderate species richness (34) and Shannon diversity values (4.20) suggest that nutrient enrichment was not an appreciable stressor at this site. The abundance of alkaliphilous taxa (76.7%) suggests a pH above 7.0.

A well-established algal biofilm and a relative lack of natural disturbance are indicated by the absence of the disturbance indicator taxon. The calculated probability of impairment by deposited sediment (25.9%) was below the MDEQ threshold, although both motile taxa (53.5%) and siltation indicator taxa (52.3%) were abundant. Metals contamination appears to be present, since 45.0% of diatoms were metals tolerant taxa.

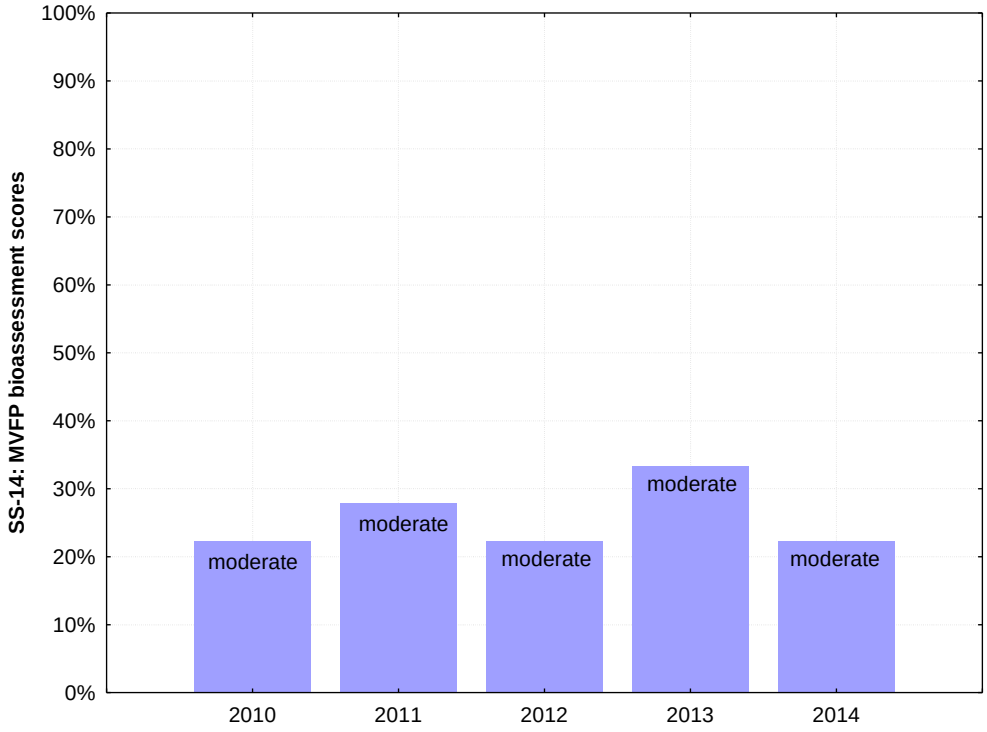

Figure 5-25. MVFP bioassessment scores: comparison among years for site SS-14. Bars are labeled with impairment classifications.

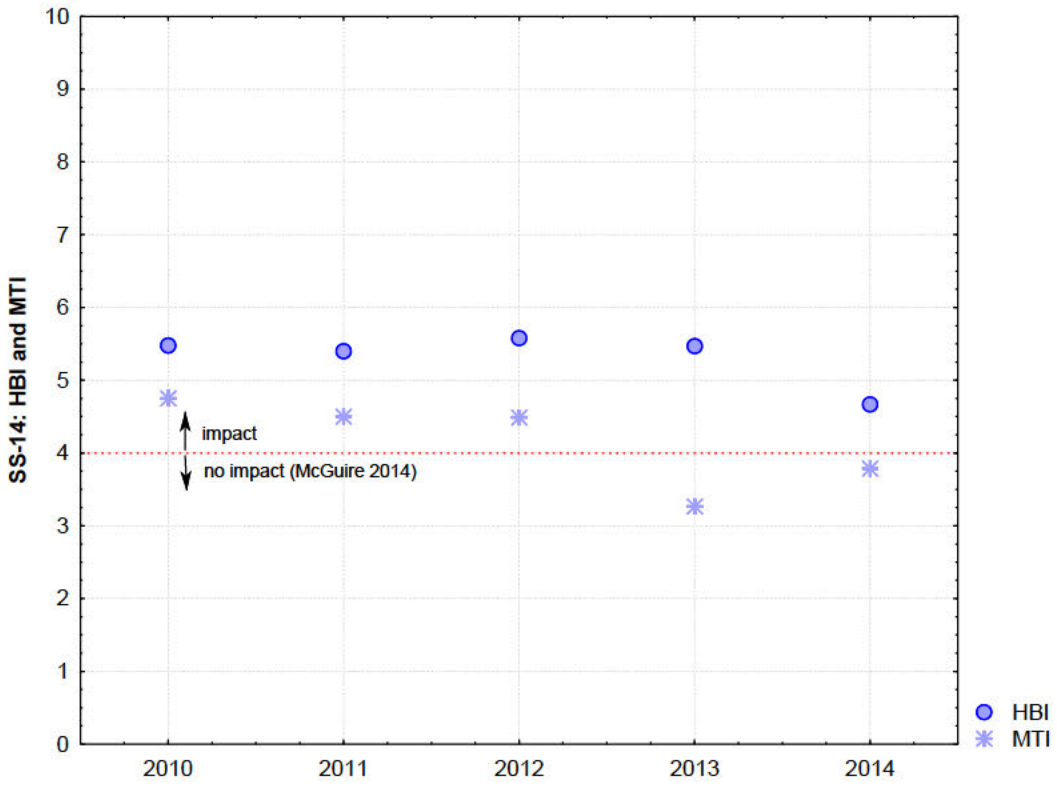

Figure 5-26. HBI and MTI values: comparison among years for site SS-14. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.12 SS-15A: Silver Bow Creek above German Gulch

Site SS-15A remained moderately impaired in 2014, as measured by the MVFP bioassessment index. Scores since 2010 at this site are graphed in Figure 5-27. According to McGuire's guidance, the MTI indicated slight impairment from metals in each year since 2010, and the HBI indicated mild nutrient enrichment over the same period [Figure 5-28].

Mayflies were represented by a single taxon, the ubiquitous *Baetis tricaudatus*, which were common, accounting for 6% of the sampled assemblage. The biotic index value (5.06) indicated a tolerant invertebrate assemblage. Nutrient enrichment is suggested by abundant snails (*Physella* sp., *Gyraulus* sp.). These taxa, along with the caddisfly *Helicopsyche* sp., also indicate warm water temperatures. The thermal preference of the assemblage was 16.4°C.

Five caddisfly taxa and eight "clinger" taxa were counted: neither group was as diverse as expected, suggesting that sediment deposition limited colonization in this reach. Contrarily, the FSBI value (4.87) indicated a sediment-sensitive assemblage. The overall taxa richness (24) was lower than expected for a low-to-mid order stream in the Middle Rockies ecoregion. No stoneflies were collected. Low overall diversity and the absence of stoneflies may both be related to poor water quality or to limited instream habitats, or both. Semivoltine taxa were poorly represented: catastrophic scour, thermal extremes, dewatering, or toxic pollutants cannot be ruled out. Filterers, especially the net-spinner *Hydropsyche* sp., strongly dominated the

functional composition of the assemblage. It seems likely that fine organic particulate matter, probably a result of algal decomposition in upstream reaches, was the dominant energy source here.

Diatoms dominated the periphyton sample, but the filamentous green alga *Cladophora* sp. was common. *Encyonema silesiacum* dominated the diatom flora, accounting for 12.0% of identified cells. Minimal stress from nutrient enrichment is suggested by the Shannon diversity index value (4.37) and by the moderate species richness (35). High pH is suggested by the abundance of alkaliphilous taxa, which accounted for 72.8% of diatoms.

Similar to all other sites in this monitoring event, natural disturbance does not appear to have been influential in this reach: *Achnanthidium minutissimum*, the disturbance indicator taxon, was rare. Motile taxa (43.8%) and siltation indicator taxa (43.2%) were common. However, the site would not be classified as sediment impaired under current MDEQ criteria, since the calculated probability of impairment (26.3%) was lower than the threshold probability. Stress from metals contamination was evident: 49.0% of diatoms were metals tolerant species

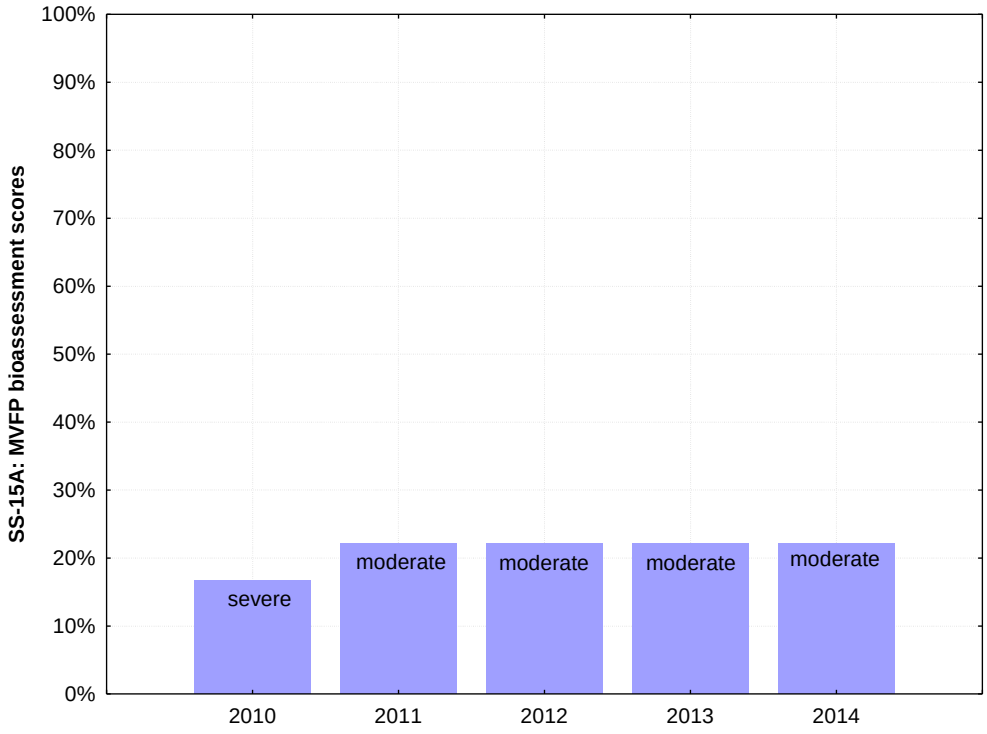

Figure 5-27. MVFP bioassessment scores: comparison among years for site SS-15A. Bars are labeled with impairment classifications.

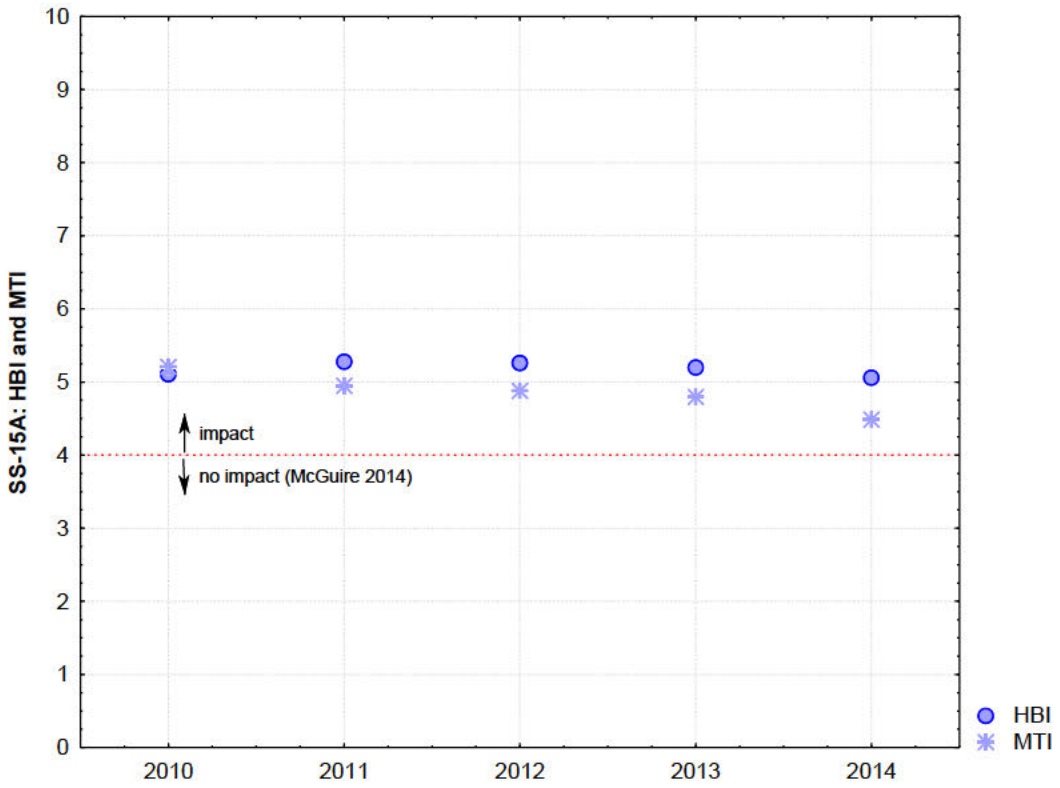

Figure 5-28. HBI and MTI values: comparison among years for site SS-15A. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.13 SS-15B: Silver Bow Creek below German Gulch

MVFP scores at site SS-15B exhibited significant improvement in 2014 compared to the previous two years. Moderate impairment was indicated in 2014 [Figure 5-29]. According to McGuire's guidance, the MTI indicated slight impairment from metals in each year since 2010, and the HBI indicated mild nutrient enrichment over the same period [Figure 5-30].

The Silver Bow Creek site below German Gulch supported no fewer than four mayfly taxa. Although none of these taxa were abundant, the increased diversity in the group probably signals improved water quality compared to the upstream Silver Bow sites. This hypothesis is supported by the presence of two quite sensitive taxa: *Cinygmula* sp. and *Drunella grandis*. The biotic index value (4.47) indicated a moderately tolerant assemblage. The dominant taxon was the net-spinning caddisfly *Hydropsyche* sp., suggesting that suspended organic particles were an abundant energy source. The thermal preference of the assemblage was calculated at 15.7°C, which is significantly cooler than preferences of upstream assemblages. Although the metals tolerance index value (4.44) was similar to the biotic index value, it seems likely that metals contamination was not influential, since metals-sensitive taxa were supported here, including *Cinygmula* sp. and *Lepidostoma* sp.

Seven caddisfly taxa and 12 "clinger" taxa were present in the sample. Sediment deposition probably did not appreciably limit colonization of stony substrates in this reach. The FSBI value

(4.57) indicated a sediment-sensitive assemblage. Overall taxa richness (26) was lower than expected, suggesting that instream habitats may have been monotonous or disrupted. Two stonefly taxa were collected, but neither was abundant. Low diversity in this group may be related to unstable streambanks, altered channel morphology, or poor riparian function. It seems likely that dewatering, thermal extremes, toxic pollutants, or other catastrophes that would limit long life cycles, were not influential here, since four semivoltine taxa were counted in the sampled assemblage. Filterers, especially *Hydropsyche* sp., strongly dominated the functional mix, but all other expected feeding groups were also represented.

Diatoms dominated the periphyton sample collected here, but other common algae taxa included the filamentous green genera *Cladophora* sp., *Stigeoclonium* sp., and *Oedogonium* sp. The most common diatoms were the species *Mayamaea atomus* (11.0%) and *Encyonema silesiacum* (11.0%). Nutrient impairment was likely minimal, since species richness (42) and the value for the Shannon index (4.34) were each consistent with expectations for a montane stream. Alkaline conditions are indicated by the abundance of alkaliphilous diatoms (72.8%) in the sample. The pH was likely higher than 7.0.

The biofilm was probably well-established and stable, since *Achnanthidium minutissimum* was rare in the sample. Motile diatoms (49.5%) and siltation indicators (47.3%) were common, but the site would not be classified as sediment impaired under current MDEQ criteria: the probability of impairment was calculated at 24.7%. This is below the MDEQ threshold for impairment by deposited sediment. More than half (52.5%) of diatoms were metals tolerant taxa, suggesting stress from metals contamination.

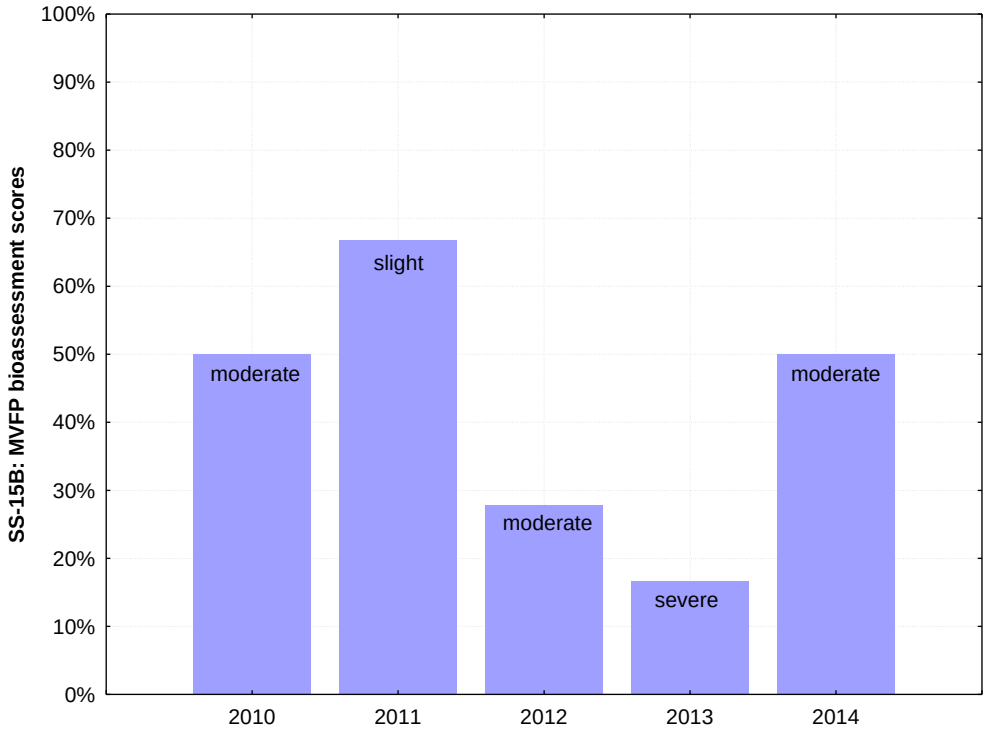

Figure 5-29. MVFP bioassessment scores: comparison among years for site SS-15B. Bars are labeled with impairment classifications.

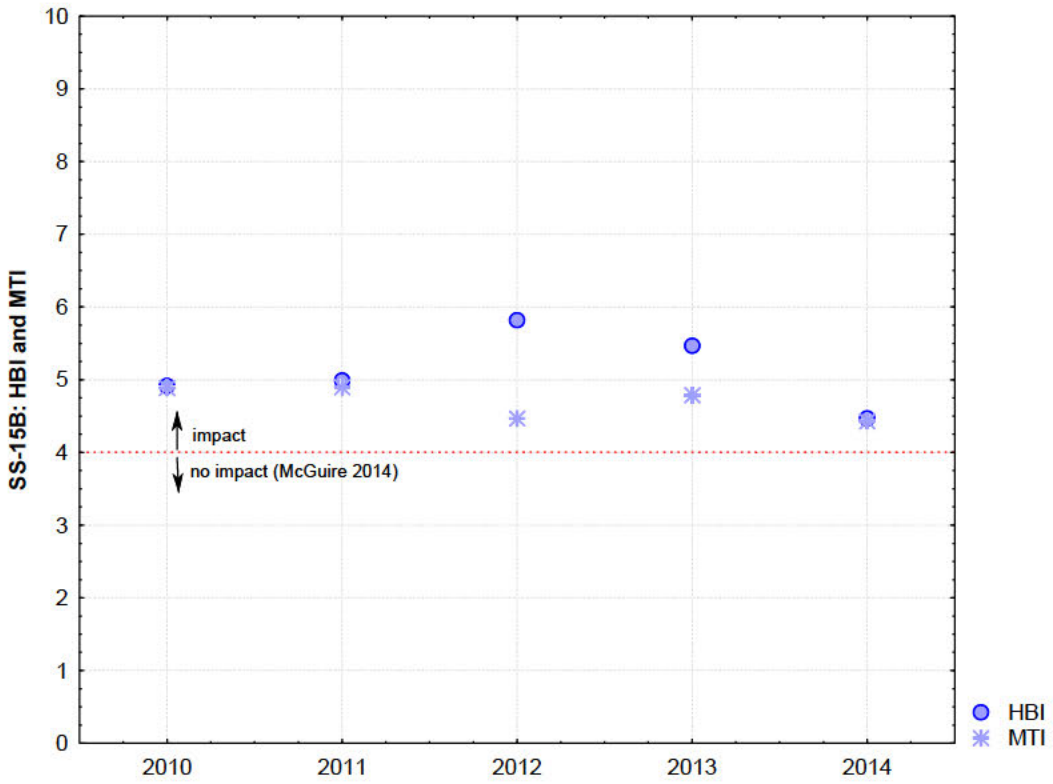

Figure 5-30. HBI and MTI values: comparison among years for site SS-15B. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.14 SS-15G: German Gulch near Confluence

Since 2012, MVFP scores at site SS-15G have diminished, indicating slight impairment in 2014. Scores are graphed in Figure 5-31. According to McGuire's guidance, the HBI and MTI metrics indicate no evidence of impairment by metals contamination or nutrient enrichment at this site [Figure 5-32].

Five mayfly taxa were counted in the sample collected here, including the sensitive ephemerellid *Drunella doddsii*, and the heptageniid *Cinygmula* sp. The biotic index value (3.65) was only slightly higher than expected values for a minimally-impaired low-order stream in the Middle Rockies ecoregion. It seems likely that water quality was good in this reach. Although the metals tolerance index value (3.61) was very nearly the same as the biotic index value, the probability of metals contamination here seems low. The site supported taxa with demonstrated sensitivity to metals, including *Cinygmula* sp. and *Lepidostoma* sp., both of which were common in the sample. The thermal preference of the assemblage was calculated at 14.4°C.

Sediment deposition probably did not appreciably stress the invertebrate assemblage here: at least six caddisfly taxa and 18 "clinger" taxa were supported at the site. The FSBI value (4.84) indicated a sediment-sensitive assemblage. Overall taxa richness (37) was somewhat lower than expected, which may be related to limited instream habitats. Three stonefly taxa were collected: it seems likely that reach-scale habitat features such as streambanks, channel morphology, and

riparian zone function were largely intact. Semivoltine taxa (7) were diverse and abundant. Catastrophes that would abort long life cycles were probably not influential here. All expected functional components were represented in apparently appropriate proportions.

The periphyton sample was dominated by diatoms, but the filamentous green alga *Stigeoclonium* sp. was also very common. The most abundant diatoms were *Cocconeis placentula v. lineata* (11.2%), followed by *Navicula tripunctata* (10.8%). Although there was no evidence of nutrient enrichment based on the taxonomic components of the assemblage, the moderately high taxa richness (46) and high Shannon diversity (4.60) suggest that nutrient enrichment may have been influential. Like many other sites in this monitoring event, pH above 7.0 is suggested by the high abundance of alkaliphilous taxa (72.3%).

The incidence of *Achnanthidium minutissimum* in the sample was low, suggesting stable and well-developed algal films in the reach. The probability of sediment impairment was high, exceeding the current MDEQ threshold. The site would be classified as sediment impaired under current MDEQ criteria. Both motile diatoms (48.0%) and siltation indicators (46.8%) were common. Only 22.7% of diatoms were metals tolerant taxa: the incidence of these species was within expectations for a typical montane stream [Teply and Bahls, 2005].

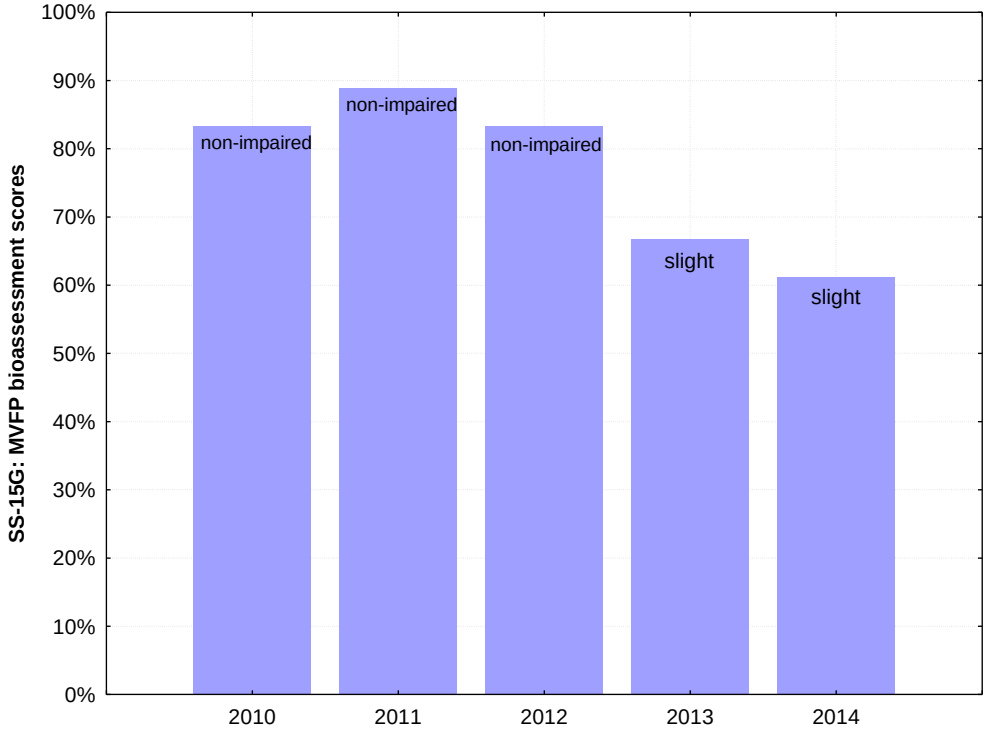

Figure 5-31. MVFP bioassessment scores: comparison among years for site SS-15G. Bars are labeled with impairment classifications.

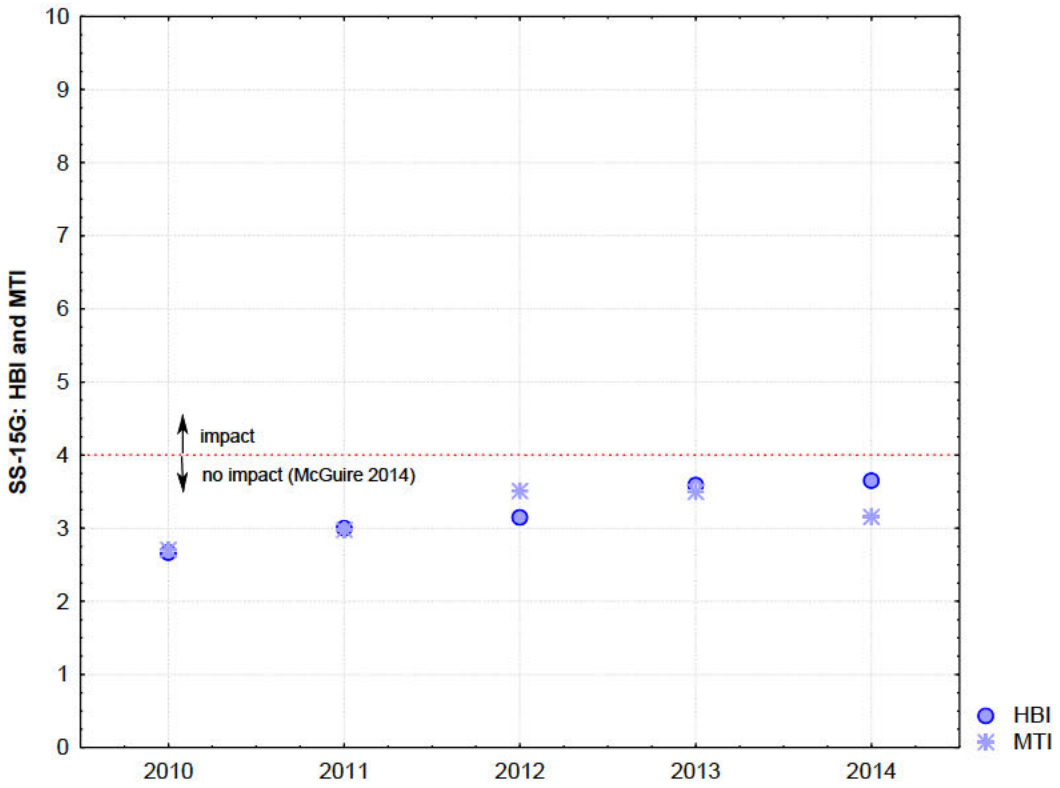

Figure 5-32. HBI and MTI values: comparison among years for site SS-15G. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.15 SS-16B: Silver Bow Creek in Reach P near Fairmont

Site SS-16B has been rated as severely impaired by the MVFP index in both years of sampling [Figure 5-33]. Scores were slightly lower in 2014 compared to 2013. According to McGuire's guidance, the HBI and MTI metrics indicate no evidence of impairment by metals contamination or nutrient enrichment at this site [Figure 5-34].

A single mayfly taxon was collected at this site: it was the ubiquitous *Baetis tricaudatus*, and only three specimens were counted in the sample. The low biotic index value (3.03) suggests a sensitive assemblage. The dominant taxon was the caddisfly *Helicopsyche* sp., which accounted for 45% of sampled organisms. The abundance of this taxon suggests that well-established algal films were an important energy source in the reach. Nutrient enrichment and a lack of shading may contribute. *Helicopsyche* sp. and another abundant caddisfly, *Brachycentrus occidentalis*, prefer warmer water temperatures. The thermal preference of the assemblage was calculated at 16.6°C. Although the metals tolerance index value (3.26) exceeded the biotic index value, the caddisfly *Lepidostoma* sp., considered sensitive to metals, was abundant. It seems likely that metals contamination was not influential here.

Low diversity among "clingers" (6 taxa) and caddisflies (4 taxa) suggests that sediment deposition may have limited colonization of stony substrate habitats. However, the FSBI value (4.21) implies a relatively sediment-sensitive assemblage. Overall taxa richness (17) was very

low: instream habitats may have been monotonous or disrupted. Similar to many other Silver Bow Creek sites, stoneflies were absent here: this may be related to altered channel morphology, loss of riparian function, or unstable streambanks. Semivoltine taxa were neither diverse (2 taxa) nor abundant. Long life cycles may have been interrupted by dewatering, scour, toxic pollutants, or thermal extremes. Scrapers, especially *Helicopsyche* sp., dominated the functional mix; filterers were also common.

The periphyton sample was dominated by diatoms, but the filamentous green alga *Stigeoclonium* sp. was also very common. *Mayamaea atomus* dominated the diatom flora, accounting for 35.2% of identified diatoms. The other abundant species was *Nitzschia palea* (28.3%). Both of these are considered strong indicators of nutrient enrichment [Potapova and Charles, 2007]. The low value for the Shannon diversity index (3.10) corresponds with the abundance of the dominant taxon, and supports a hypothesis of nutrient enrichment. Taxa tolerant of low oxygen concentrations were abundant, accounting for 34.2% of diatoms. This finding is also consistent with nutrient pollution. The low species richness (27) is within expectations for a stream in the Middle Rockies. Alkaliphilous taxa accounted for 63.5% of diatoms: pH may have been higher than 7.0.

No specimens of the disturbance indicator taxon were identified, suggesting well-established and stable biofilms in the reach. The probability of sediment impairment, based on current MDEQ criteria was 13.9%, well below the threshold that would indicate impairment. However, both motile taxa (82.2%) and siltation indicators (79.0%) were very abundant. There is a strong indication of metals contamination, since 72.0% of diatoms in the sample were metals tolerant taxa.

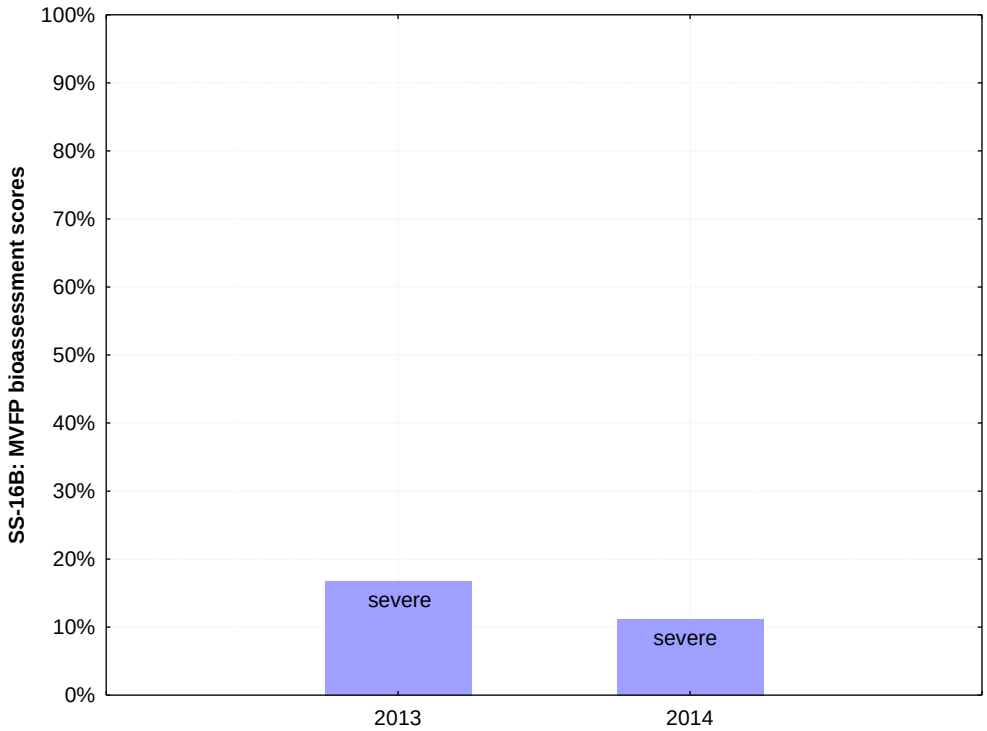

Figure 5-33. MVFP bioassessment scores: comparison among years for site SS-16B. Bars are labeled with impairment classifications.

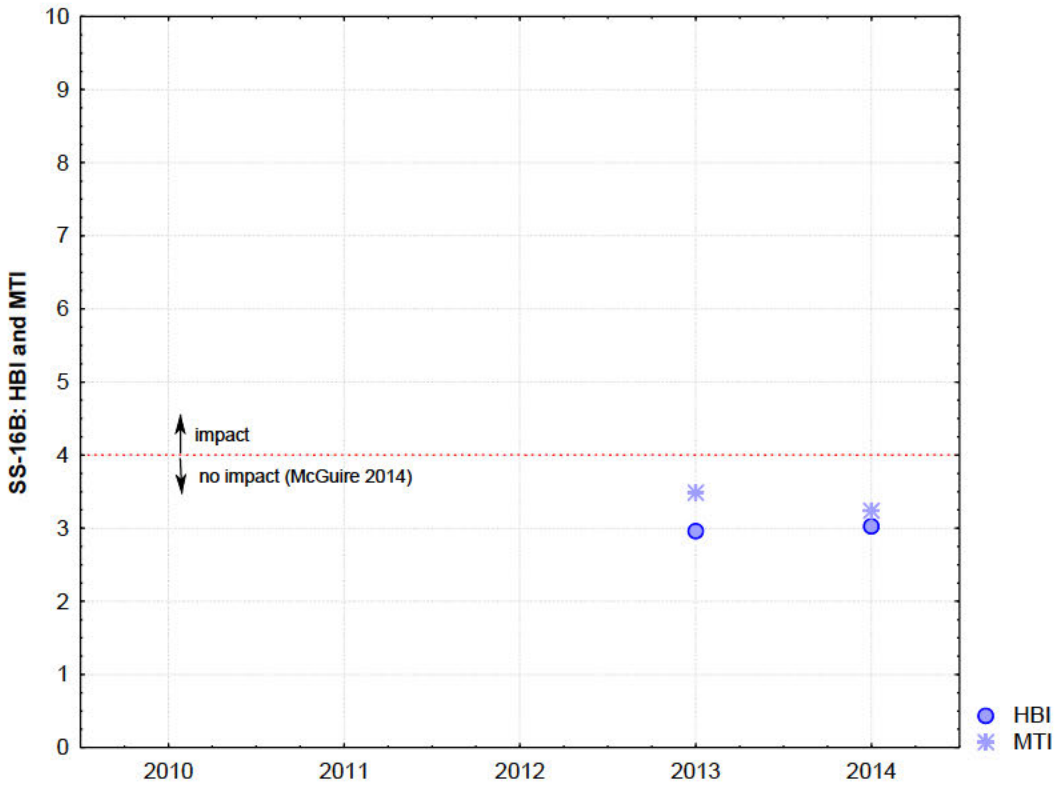

Figure 5-34. HBI and MTI values: comparison among years for site SS-16B. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.16 SS-17D: Silver Bow Creek below Stewart Street at Opportunity

Moderate impairment has been indicated at site SS-17D in 2013 and 2014 [Figure 5-35]. According to McGuire's guidance, the HBI and MTI metrics indicate no evidence of impairment by metals contamination or nutrient enrichment at this site [Figure 5-36] in 2014.

Metric indicators of water quality suggest impaired conditions at this site: a single mayfly taxon (*Baetis tricaudatus*) was collected, and the biotic index value (4.02) indicated a tolerant invertebrate assemblage. Two filtering caddisfly taxa (*Brachycentrus occidentalis* and *Hydropsyche* sp.) and the blackfly *Simulium* sp. were the most abundant taxa in the sample, suggesting that fine organic particulates in suspension were an important energy source in the reach. The source of such material is often senescent filamentous algae at nearby upstream sites: thus, nutrient enrichment may be present. The thermal preference of the assemblage was calculated at 15.9°C. The metals tolerance index value (4.20) was higher than the biotic index value, but metals contamination seems unlikely, given the presence of a few specimens of *Lepidostoma* sp., considered to be metals-sensitive.

Six caddisfly taxa but only nine "clinger" taxa were counted. Sediment deposition may limit colonization of stony substrate habitats in this reach. However, the FSBI value (4.66) indicates a relatively sediment-sensitive assemblage. Overall taxa richness (25) was low. Instream habitats may have been monotonous or disturbed. A single specimen of *Skwala* sp. represented

stoneflies: low diversity in this group may be related to disruption of reach-scale habitat features such as streambanks, channel morphology, or riparian function. Semivoltine taxa were poorly represented: a single elmid beetle was collected. This site may have experienced catastrophic toxic pollutants, dewatering, scour, or thermal extremes, which interrupt long life cycles. Filterers, especially caddisflies and blackflies, strongly dominated the functional composition of the assemblage. This pattern is sometimes interpreted as evidence of nutrient enrichment.

Oedogonium sp., a filamentous green alga, dominated the periphyton sample collected here, but diatoms were also abundant. Among the diatoms, *Mayamaea atomus* was the most abundant, accounting for 21.8% of identified specimens. The next most common taxa were *Nitzschia fonticola* (19.3%) and *Nitzschia palea* (15.2%). According to the analyses of Potapova and Charles [2007], *M. atomus* and *N. palea* are strong indicators of nitrogen and/or phosphorus enrichment, and *N. fonticola* is a strong indicator of nitrogen enrichment. Although the species richness (30) is within expectations for a montane stream, the Shannon diversity index value (3.52), consistent with the abundance of the dominant taxon, suggests nutrient impairment. Alkaline conditions are suggested by the high abundance of alkaliphilous taxa, which accounted for 75.8% of diatoms.

It seems likely that biofilms were stable and well-established in this reach, since no specimens of the disturbance indicator taxon were counted. Using current MDEQ criteria, the probability of sediment impairment was low (14.7%), but motile taxa (83.8%) and siltation indicators (79.8%) were both very abundant. Over half (53.3%) of identified diatoms were metals tolerant taxa. It seems likely that metals contamination stressed the flora at this site.

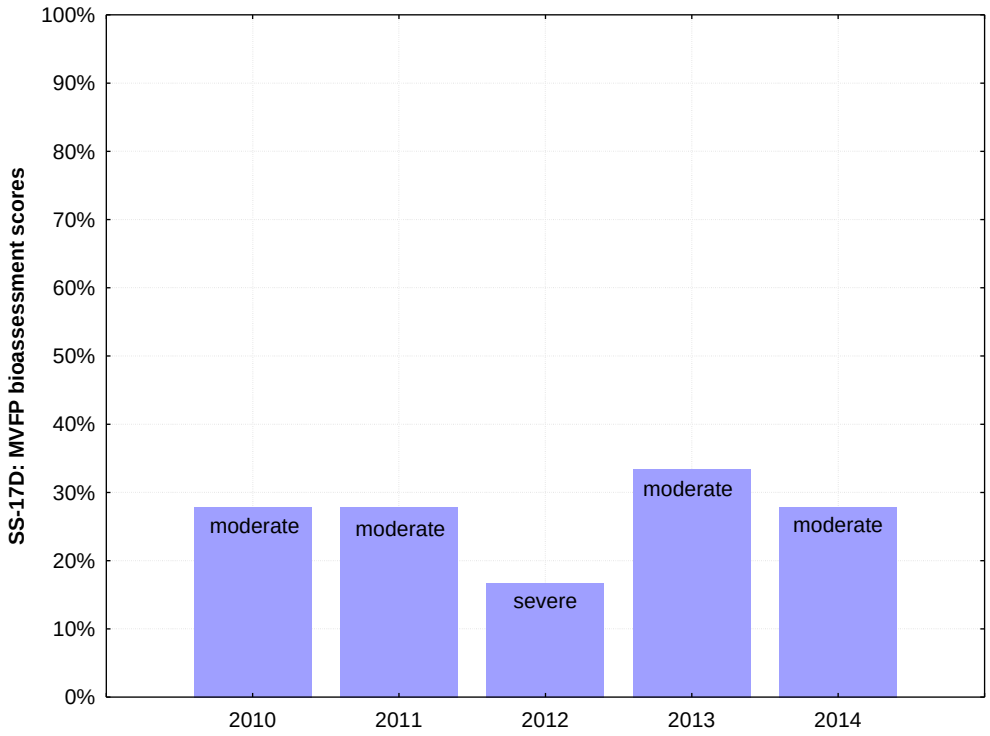

Figure 5-35. MVFP bioassessment scores: comparison among years for site SS-17D. Bars are labeled with impairment classifications.

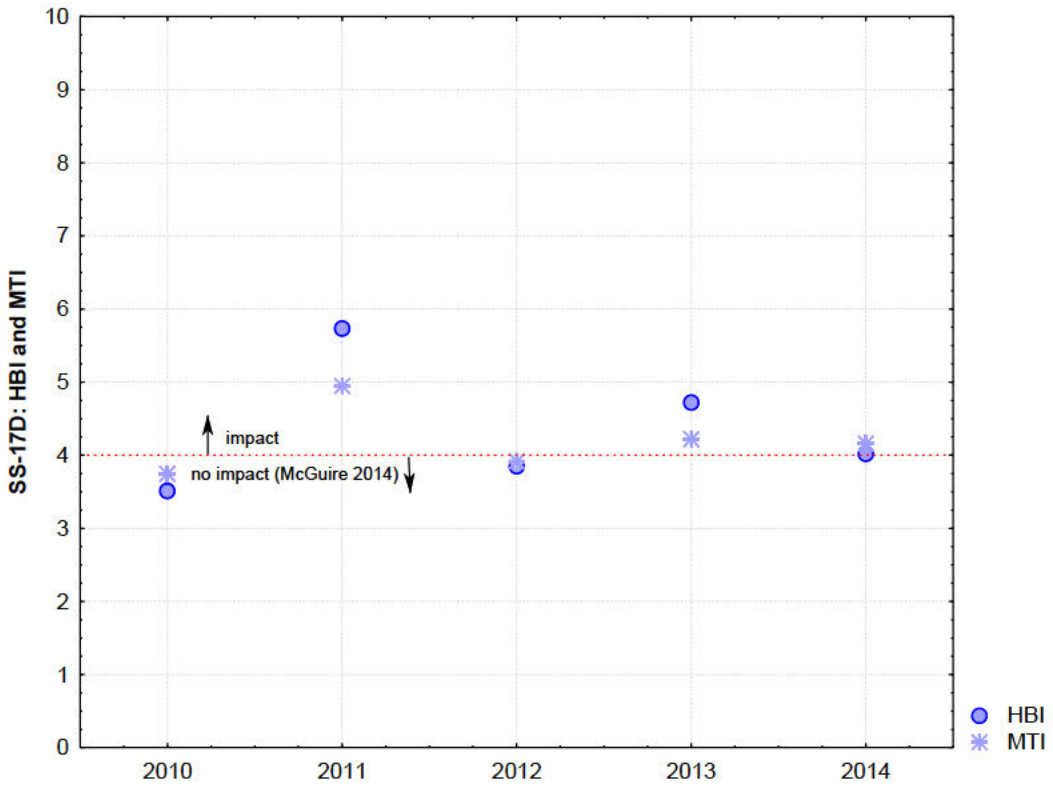

Figure 5-36. HBI and MTI values: comparison among years for site SS-17D. The red dashed line represents the "no impact" threshold for both metrics established by McGuire for the Clark Fork River basin.

5.3.3.17 SS-19: Silver Bow Creek at Frontage Road

Site SS-19 was first sampled in 2014. The MVFP bioassessment index indicates moderate impairment. According to McGuire's guidance, the HBI and MTI metrics indicate slight impairment by metals contamination and mild nutrient enrichment at this site.

Three mayfly taxa were collected at this site, but two of these taxa were each represented by only a single specimen. The biotic index value (4.53) indicated a tolerant assemblage. These findings suggest that water quality was impaired in this reach. Abundant filter-feeders (especially *Hydropsyche* sp. and *Simulium* sp.) and the high proportion of hemoglobin-bearing taxa (especially the chironomid *Microtendipes* sp., which accounted for 11.5% of sampled organisms) suggest nutrient enrichment and additional stress associated with hypoxic conditions. The thermal preference of the assemblage was 15.6°C.

Sediment deposition did not seem to appreciably influence the biota in this reach: six caddisfly taxa and 13 "clinger" taxa were counted in the sample. The FSBI value (4.48) indicated a sediment-sensitive assemblage. Overall taxa richness (25) was low, suggesting monotonous or disturbed instream habitats. The stonefly *Skwala* sp. was present: two individuals were counted. Low diversity in this group may be associated with unstable streambanks, loss of riparian function, or altered channel morphology. Catastrophic dewatering, thermal extremes, sediment pulses or toxic inputs cannot be ruled out, since semivoltine taxa

were neither diverse nor common. Filterers and gatherers overwhelmed the functional composition of the assemblage. This pattern is sometimes interpreted as evidence of poor water quality.

Diatoms were the dominant algal form in the periphyton sample, but the filamentous green genera *Oedogonium* sp. and *Stigeoclonium* sp. were also very common. *Mayamaea atomus* (22.2%) and *Nitzschia palea* (15.3%), both of which were associated with nutrient enrichment in the analyses of Potapova and Charles [2007], were the dominant diatoms. The Shannon diversity index value (4.27) corresponds with the high species richness (47). High richness in a montane stream suggests nutrient enrichment [Teply and Bahls, 2005]. The pH at this site may have been higher than 7.0, since alkaliphilous taxa accounted for 69.5% of diatoms.

Achnanthidium minutissimum was rare in the sample, suggesting stable, well-developed biofilms. Motile taxa (67%) and siltation indicators (61.5%) were common, but the probability of sediment impairment (24.0%) fell below the current MDEQ criteria: the site would not be classified as sediment impaired by this method. Metals contamination probably stresses the flora here, since 55.8% of diatoms were metals tolerant taxa.

5.3.4 Habitat Assessment Data

Subjective visual assessments of habitat parameters are summarized in Table 5-9. In general, the uppermost sites in the SSTOU (SS-01, SS-05A, SS-06G, and SS-07), with locations above and immediately below the Butte WWTP, had lowest overall habitat assessment scores. These sites were noted to have poor or marginal instream habitat conditions, channel alterations, and lack of riparian habitat.

Sites located in reaches between the Butte WWTP and German Gulch (SS-08, SS-10A, SS-10B, SS-11C, SS-11D, SS-13, SS-14, SS-15A, and SS-15B) were reported to have, in general, somewhat better, though sub-optimal, instream habitat conditions, less notable channel alteration, and better riparian zone integrity.

Sites SS-15G, located in German Gulch, and SS-16B, located near Fairmont, were reported to have the best habitat conditions among sites in the SSTOU during this monitoring event. Instream habitat parameters were judged to be optimal or sub-optimal at these sites, and riparian zone integrity was noted to be optimal. Field notes comment on dewatering at SS-15G.

Sites located furthest downstream, SS-17D and SS-19, had newly constructed channels, as reported in field notes. A lack of riparian vegetation and bank vegetative protection was noted.

Table 5-9. Results of subjective visual habitat assessments. Silver Bow Creek watershed, September 9–11, 2014.

Site ID	Site Location	Habitat Parameter										Total Score
		Epifaunal substrate/available cover	Embeddedness	Velocity/depth regime	Sediment deposition	Channel flow status	Channel alteration	Frequency of riffles (or bends)	Bank stability (left/right)	Vegetative protection (left/right)	Riparian vegetative zone width (left/right)	
SS-01	Blacktail Creek at Father Sheehan Park	12	5	8	5	18	6	7	9/9	7/8	2/3	99
SS-05A	Silver Bow Creek above Butte Reduction Works	10	4	7	4	18	5	8	9/9	3/8	2/5	92
SS-06G	Silver Bow Creek above Butte WWTP	13	11	13	15	18	8	11	9/9	5/8	2/3	125
SS-07	Silver Bow Creek below Butte WWTP	8	10	8	13	17	8	10	9/9	8/8	3/3	114
SS-08	Silver Bow Creek at Rocker	15	14	15	14	18	15	16	9/9	9/8	4/6	152
SS-10A	Silver Bow Creek above Sand Creek	13	12	13	13	18	13	15	9/9	9/9	6/6	145
SS-10B	Silver Bow Creek below Sand Creek	13	12	12	12	18	12	12	9/9	8/8	5/5	135
SS-11C	Silver Bow Creek above Browns Gulch	13	12	12	12	18	13	15	9/9	9/9	6/6	143
SS-11D	Silver Bow Creek below Browns Gulch	13	13	12	13	18	12	13	9/9	9/9	7/7	144
SS-13	Silver Bow Creek in Reach L	11	12	10	13	18	12	10	9/9	8/8	7/7	134
SS-14	Silver Bow Creek at Miles Crossing	12	12	12	15	18	15	16	9/9	8/8	6/6	146
SS-15A	Silver Bow Creek above German Gulch	12	10	12	14	18	9	18	9/9	7/7	5/5	135
SS-15B	Silver Bow Creek below German Gulch	17	12	17	17	18	13	18	9/9	9/8	4/4	155
SS-15G	German Gulch near confluence	18	18	18	18	8	14	18	10/10	9/9	8/8	166
SS-16B	Silver Bow Creek in Reach P near Fairmont	14	13	17	16	18	16	18	9/9	7/7	8/8	160
SS-17D	Silver Bow Creek below Stewart St Opportunity	10	13	15	13	18	16	18	8/8	5/5	4/4	137
SS-19	Silver Bow Creek at Frontage Road	10	13	11	14	18	15	17	8/8	5/5	5/5	134

5.4 CONCLUSIONS

Evidence for impaired biological integrity could be detected at all sites in the SSTOU during this monitoring event, but scoring and interpretation of aquatic invertebrate and periphyton assemblages frequently gave differing estimates of the severity of impairment, the probable stressors influencing each site, or both. Aquatic invertebrate assemblages generally indicated moderate or severe impairment [Table 5-6; Figure 5-1], while periphyton assemblages generally indicated fair or poor conditions across the study reaches. Table 5-10 summarizes the probable stressors judged to be influential, based on the taxonomic composition and attributes (function, tolerance, physiology, habitus, etc.) of organisms identified at each site.

Table 5-10. Predicted stressors at each site, based on the taxonomic composition and attributes of biological assemblages.[23]

Site ID	Site Location	Habitat Parameter				
		Nutrients	Metals	Sediments	Hypoxia	Habitat Disruption
SS-01	Blacktail Creek at Father Sheehan Park	m/p		m		m
SS-05A	Silver Bow Creek above Butte Reduction Works	m/p	p	m		m
SS-06G	Silver Bow Creek above Butte WWTP	m/p	?m	m		m
SS-07	Silver Bow Creek below Butte WWTP	m/p	p	m	m/p	m
SS-08	Silver Bow Creek at Rocker	m/p	p	m	p	m
SS-10A	Silver Bow Creek above Sand Creek	m/p	p	m		m
SS-10B	Silver Bow Creek below Sand Creek	m	p	m	m	m
SS-11C	Silver Bow Creek above Browns Gulch	m	p	m		m
SS-11D	Silver Bow Creek below Browns Gulch	m	p		m	
SS-13	Silver Bow Creek in Reach L	m	p	m	m	m
SS-14	Silver Bow Creek at Miles Crossing	m	p	m		m
SS-15A	Silver Bow Creek above German Gulch	m	p	?m		m
SS-15B	Silver Bow Creek below German Gulch	?m	p			
SS-15G	German Gulch near confluence	?p		p		
SS-16B	Silver Bow Creek in Reach P near Fairmont	?m/p	p	m	p	m
SS-17D	Silver Bow Creek below Stewart St Opportunity	m	p	m		m
SS-19	Silver Bow Creek at Frontage Road	m	p		m	m

[23] Scores: m = macroinvertebrate sample indicates stress, ?m = macroinvertebrate sample inconclusive, p = periphyton sample indicates stress, ?p = periphyton sample inconclusive.

On the basis of the taxonomic composition of the aquatic invertebrate fauna and the performance of the Metals Tolerance Index (MTI), the influence of metals contamination was a possible stressor at site SS-06G. However, metals tolerant diatom taxa were abundant at site SS-05A, and at sites below the Butte WWTP. Between that site (SS-07) and site SS-10A, metals contamination may have been severe, based on the proportional representation of these tolerant taxa in the diatom flora. Although contamination was evident below Sand Creek (site SS-10B), from this site down to Reach 1 (SS-13) proportions of metals tolerant taxa were somewhat lower than at sites upstream and downstream. Metals contamination again appeared to be severe from Miles Crossing (SS-14) to the site below German Gulch (SS-15B). A "metals gap" was notable in the longitudinal progression of sites at the German Gulch near confluence (SS-15G) site. Severe contamination was again very probable from the Reach P site (SS-16B) downstream to Frontage Road (SS-19).

Diatom assemblages suggested nutrient impairment in the reaches from SS-01 to SS-10A, with stress from nutrients less apparent at sites from SS-10B downstream. Based on occurrences of low oxygen tolerant species, hypoxic conditions, perhaps related to nutrient enrichment and/or warm water temperatures, may have been influential at sites SS-07, SS-08, and SS-16B. Aquatic invertebrate assemblages generally suggested nutrient enrichment at most sites; the sites below (SS-15B) and in German Gulch (SS-15G) and near Fairmont (SS-16B) supported invertebrate assemblages that did not exhibit evidence of nutrient influence. Hemoglobin-bearing taxa, suggesting hypoxic conditions, were more abundant than expected at SS-07, SS-10B, SS-11D, SS-13, and SS-19.

Evidence for the influence of sediment deposition could be detected in aquatic invertebrate assemblages collected at most sites in this study. Only sites SS-11D, SS-15A, SS-15B, SS-15G and SS-19 appeared to support invertebrate assemblages that were sensitive to deposited sediment. Diatom assemblages at site SS-16B were dominated by sediment tolerant motile forms, suggesting sediment deposition at that site.

When visual assessment of habitat parameters are scored similarly to bioassessment based on aquatic invertebrates, the relationships between scores may be useful in distinguishing the relative effects of habitat disturbances and water quality perturbations on aquatic invertebrate assemblages. Figure 5-37 is a graph of bioassessment scores plotted against habitat assessment scores for the sites in this study. The tight cluster of sites in the lower right quadrant of the graph, where habitat scores are much higher than associated bioassessment scores, strongly suggests that water quality limits invertebrate assemblages at these sites.

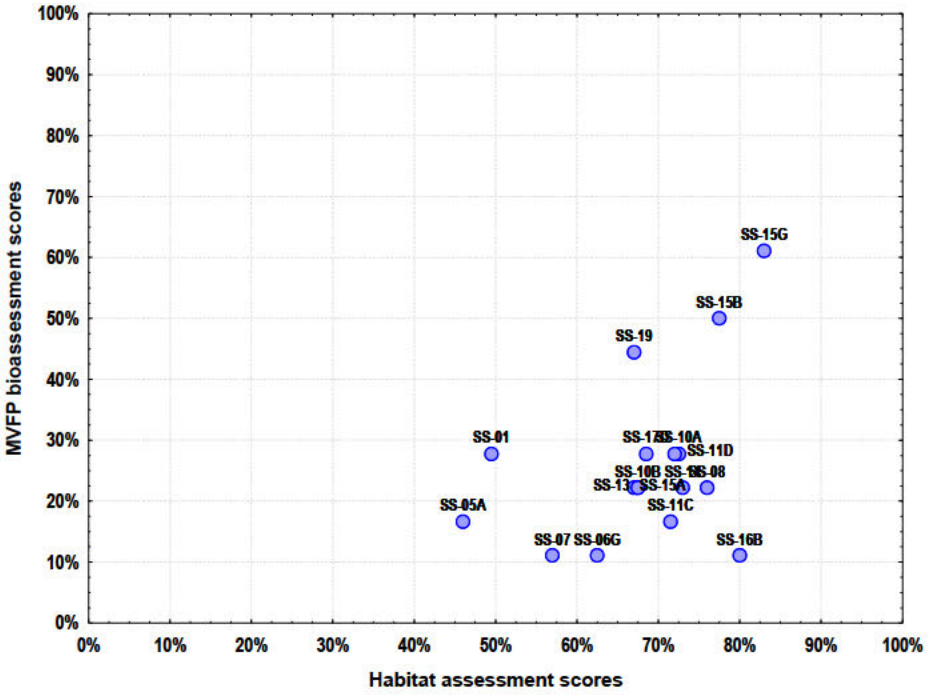

Figure 5-37. MVFP bioassessment scores plotted against habitat assessment scores for Silver Bow Creek watershed sites, September 9 – 11, 2014. Both assessments are expressed as percent of maximum possible score.

6.0 FISH[24]

6.1 INTRODUCTION

Historically, sampling of fish in Silver Bow Creek was very limited because of the extremely harsh environment and the perceived absence of fish. In 2002, Montana Fish, Wildlife and Parks (MFWP), Montana Department of Environmental Quality (MDEQ), and the Natural Resource Damage Program (NRDP) of the Montana Department of Justice believed it was important to initiate fish sampling because of the potential for improved water quality associated with remediation and restoration activities of the Streamside Tailings Operable Unit (SSTOU) in Silver Bow Creek. Improved water quality resulting from tailings removal along Silver Bow Creek was expected to provide conditions that would allow fish to survive and complete life-history cycles to sustain a fishery. Fish sampling began in 2002 to monitor and document fish response to ongoing remediation activities. The sampling effort was expanded by adding new electrofishing sections in 2005, 2008, and 2014 to provide a better understanding of the fishery.

6.2 METHODS

Six established electrofishing sections were sampled in both the spring (late March) and fall (early October) in 2014. This was a departure from past sample years, as only a fall sample was typically completed. The spring sample was added in 2014 to look for seasonal differences in species location and abundance at the sample sites. Sections sampled in 2014 included the Father Sheehan Park, Lower Area One, Rocker, Ramsay, Below German Gulch, and Above Highway One sections [Figure 6-1]. The Below German Gulch section was unable to be sampled during the fall effort because the site was being remediated and was completely dewatered [Figure 6-1]. An additional site however, was added near Fairmont (Fairmont section) [Figure 6-1]. This section was added to monitor species composition and relative abundance downstream of the Silver Bow Creek fish barrier that was constructed during the fall of 2014 just upstream of the site [Figure 6-1]. The barrier was constructed to prevent non-native trout species (primarily brown trout and rainbow trout) from invading upper Silver Bow Creek and competing and/or hybridizing with native westslope cutthroat trout present in the upper basin. Table 6-1 provides a description of all current sample sites in Silver Bow Creek.

At all sections, catch-per-unit-effort sampling of fish was conducted using a backpack electrofishing unit (LR-24 Electrofisher manufactured by Smith Root, Inc.). A single upstream pass was conducted by a two or three-person crew. The entire channel was sampled at all sections and one or two netters captured all observable fish. All fish were identified to species,

[24] Chapter 6 was prepared by Jason Lindstrom (Montana Fish, Wildlife, and Parks) with minor editing and formatting by RESPEC.

measured to the nearest millimeter and released. Section lengths were documented and time of electrofishing was recorded from the internal timer of the electrofisher to provide measures of sampling effort.

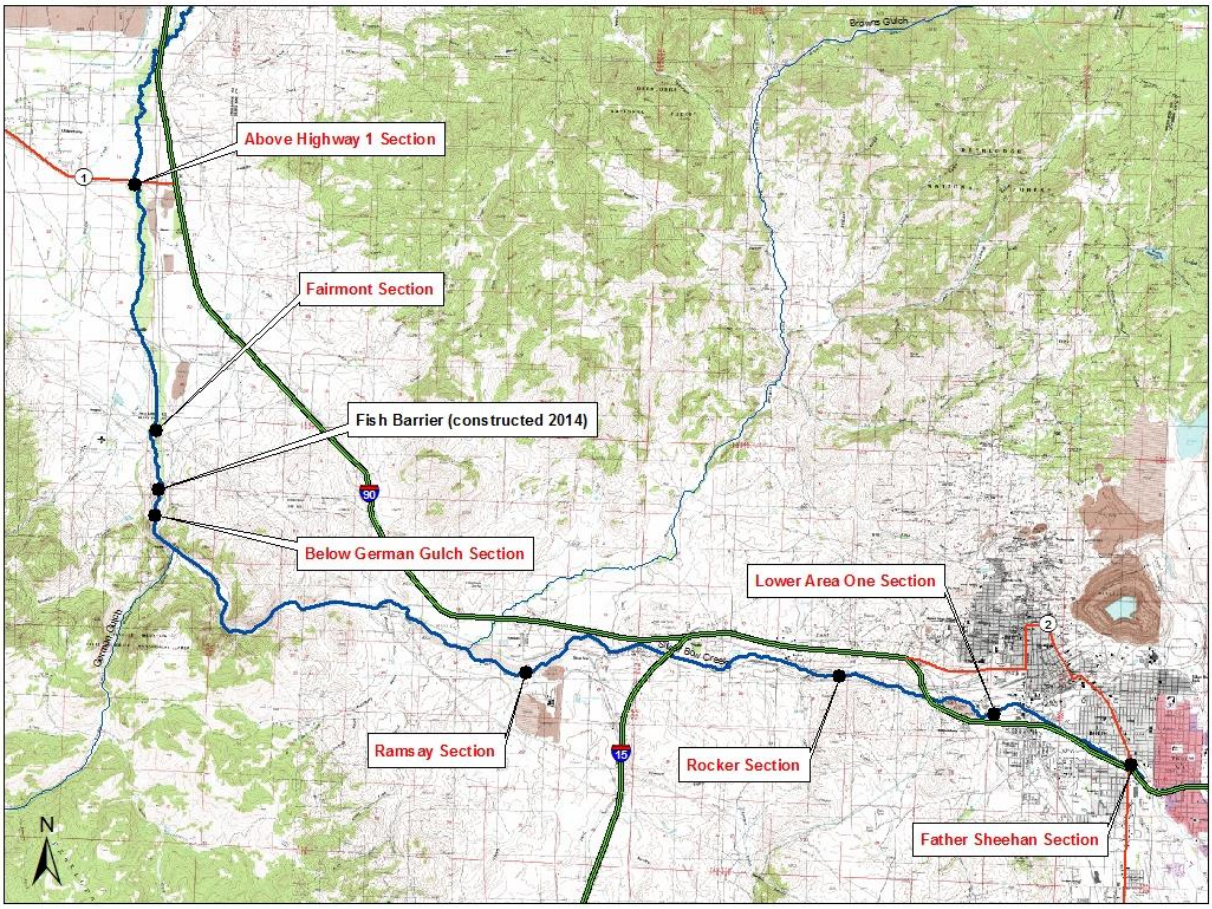

Figure 6-1. Map of the Silver Bow Creek fishery study area.

Table 6-1. Silver Bow Creek fish sample section characteristics.

Section	Year Remed-iated	Length (ft)	Sample Years		Location (GPS coordinates; NAD 83)			
			Spring	Fall	Downstream		Upstream	
					Latitude	Longitude	Latitude	Longitude
Father Sheehan Park		656	2014	2005-2014[25]	45.98524	-112.50719		
Lower Area One[26]		700	2014	2005-2014	45.99489	-112.54819	45.99550	-112.54564
Rocker	2001	1000	2014	2002-2014[27]	46.00123	-112.59315	46.00151	-112.58925
Ramsay	2005	1,000	2014	2002-2014[28]			46.00095	-112.68165
Below German Gulch	2014	1,000	2004, 2005, 2007, 2014	2003-2013	46.02852	-112.79500	46.02557	-112.79507
Fairmont	2009	902		2014	46.04681	-112.79534	46.04534	-112.79556
Above Highway 1 Crossing	2012	1,066[29]	2014	2008-2014	46.09510	-112.80492	46.09378	-112.80405

6.3 RESULTS

6.3.1 General

Fish sampling results from 2002 through 2014 have primarily consisted of determining the presence or absence of a fish species, an estimate of number of fish per 100 seconds of electrofishing effort also known as catch-per-unit-effort (CPUE), and basic size structure of fish captured. This level of effort is appropriate for determining fishery trends relating water quality issues to fishery levels, and assessing fishery improvements due to ongoing remediation and restoration activities.

Fish species composition and abundance in Silver Bow Creek varies throughout the sections sampled. Table 6-2 shows species presence and general abundance in various portions of the watershed as of 2014 for westslope cutthroat trout (*Oncorhynchus clarkii lewisi*), brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus mykiss*), longnose sucker (*Catostomus catostomus*), largescale sucker (*Catostomus macrocheilus*), slimy sculpin (*Cottus cognatus*), and

[25] Not sampled in 2006.

[26] Section relocated in 2012. Prior to 2012, sample section extended 1,000 feet downstream from the downstream terminus (45.99606, -112.56037) to the upstream terminus (45.99533, -112.55781).

[27] Not sampled in 2005.

[28] Not sampled in 2005.

[29] Section was 820 feet prior to 2012.

central mudminnow (*Umbra limi*). These represent all of the species that are known to occur in Silver Bow Creek. Westslope cutthroat trout, longnose and largescale sucker, and slimy sculpin are native to the watershed while brook trout, rainbow trout, and central mudminnow are present due to introductions. Brown trout (*Salmo trutta*), an introduced species, occur downstream of Silver Bow Creek at the Warm Springs Ponds. However, to date, this species has not been captured during routine sampling efforts in the survey reaches of Silver Bow Creek.

A general trend in fish species composition indicates that trout species, which are relatively sensitive to poor water quality, are most common in upstream reaches of Silver Bow Creek as well as in tributaries of Silver Bow Creek. Based on the limited number captured during fall sampling, trout occur in relatively low densities in mainstem Silver Bow Creek from Butte to the Warm Springs Ponds. Fall sampling to date has tended to show growing numbers of trout in places where they historically were absent (e.g., Ramsay and Rocker sections).

More tolerant species such as longnose sucker and slimy sculpin are present in most electrofishing sections of Silver Bow Creek. Suckers tend to be most abundant near the Rocker section but are still fairly common both up and downstream from this site. In 2014, a sucker species that had yet to be observed in Silver Bow Creek, the largescale sucker, was documented in the new section established near Fairmont. Largescale suckers are common in the Warm Springs Ponds as well as in larger streams of the upper Clark Fork Basin such as the Clark Fork River and Little Blackfoot River. Sculpin are present at variable densities throughout most all of Silver Bow Creek, but tend to be most abundant in upstream reaches near Butte. Central mudminnow are not overly common and occur primarily near Butte and throughout lower Blacktail Creek, but have been observed in Silver Bow Creek as far downstream as Ramsay.

Table 6-2. Fish species presence/absence and general rating of abundance along Silver Bow Creek.[30]

Section	Species						
	Westslope Cutthroat Trout	Brook Trout	Rainbow Trout	Longnose Sucker	Largescale Sucker	Slimy Sculpin	Central Mud-minnow
Father Sheehan Park	R	A	NP	P	NP	C	R
Lower Area One	R	P	NP	C	NP	A	R
Rocker	P	P	NP	A	NP	R	R
Ramsay	P	P	R	P	NP	P	R
Below German Gulch	P	P	R	P	R	C	NP
Above Highway 1	P	P	P	P	R	C	NP

[30] Abundance abbreviations: A = abundant, C = common, P = present, R = rare, NP = not present.

6.3.2 Fish Sampling – 2002-2014

Table 6-3 contains a table of catch-per-unit-effort values for all fish sample sections in Silver Bow Creek from 2002-2014.

Table 6-3. Catch-per-unit-effort values (fish captured per 100 seconds electrofishing time) for all species and sample sections in Silver Bow Creek, 2002-2014. Rainbow trout include phenotypic hybrids of cutthroat trout and rainbow trout.

Section	Species	2002	2003	2004		2005		2006	2007		2008	2009	2010	2011	2012	2013	2014	
				Spring	Fall	Spring	Fall		Spring	Fall							Spring	Fall
Father Sheehan Park	Westslope Cutthroat Trout	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
	Brook Trout	n/a	n/a	n/a	n/a	n/a	1.9	n/a	n/a	2.3	3.6	5.9	6.5	5.7	11.8	12.7	5.6	7.3
	Longnose Sucker	n/a	n/a	n/a	n/a	n/a	1.0	n/a	n/a	2.2	0.5	0.1	0.7	0.3	0.3	0.0	0.0	0.0
	Slimy Sculpin	n/a	n/a	n/a	n/a	n/a	3.8	n/a	n/a	4.9	3.6	2.6	1.9	2.1	2.4	0.7	0.9	0.0
	Central Mudminnow	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	1.4	0.7	0.4	0.3	0.1	0.1	0.0	0.0	0.0
Lower Area One	Westslope Cutthroat Trout	n/a	n/a	n/a	n/a	n/a	0.0	0.0	n/a	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
	Brook Trout	n/a	n/a	n/a	n/a	n/a	0.0	0.0	n/a	0.1	0.0	0.1	1.0	0.7	0.3	0.2	1.0	0.4
	Longnose Sucker	n/a	n/a	n/a	n/a	n/a	12.0	3.1	n/a	1.4	1.7	1.0	0.4	0.1	2.5	0.8	1.6	0.1
	Slimy Sculpin	n/a	n/a	n/a	n/a	n/a	0.7	6.9	n/a	7.8	4.6	3.8	1.4	0.2	4.6	5.2	2.2	na
	Central Mudminnow	n/a	n/a	n/a	n/a	n/a	0.2	0.1	n/a	0.3	0.2	0.4	0.0	0.1	0.0	0.0	0.0	0.1
Montana Avenue	Westslope Cutthroat Trout	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Brook Trout	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Longnose Sucker	2.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Slimy Sculpin	3.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Central Mudminnow	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rocker	Westslope Cutthroat Trout	0.0	0.0	n/a	0.0	n/a	0.0	0.0	n/a	0.0	0.0	0.0	0.2	0.1	0.0	0.6	0.9	0.0
	Brook Trout	0.0	0.0	n/a	0.0	n/a	0.0	0.0	n/a	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1

	Longnose Sucker	4.9	3.0	n/a	1.2	n/a	4.7	8.7	n/a	4.4	8.9	2.3	13.7	10.9	21.7	18.05*	3.1	5.2
	Slimy Sculpin	0.1	0.1	n/a	0.1	n/a	0.0	0.2	n/a	0.2	0.0	0.1	0.1	0.0	0.3	0.0	0.1	0.0
	Central Mudminnow	0.0	0.0	n/a	0.0	n/a	0.0	0.0	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Above Ramsay	Westslope Cutthroat Trout	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Brook Trout	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Longnose Sucker	n/a	n/a	n/a	n/a	n/a	5.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Slimy Sculpin	n/a	n/a	n/a	n/a	n/a	0.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Central Mudminnow	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ramsay	Westslope Cutthroat Trout	n/a	0.0	n/a	0.0	n/a	n/a	0.0	n/a	0.0	0.1	0.3	0.5	1.0	0.6	1.2	1.1	0.8
	Rainbow Trout	n/a	0.0	n/a	0.0	n/a	n/a	0.0	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Brook Trout	n/a	0.0	n/a	0.0	n/a	n/a	0.0	n/a	0.1	0.1	0.0	0.1	0.0	0.0	0.2	0.3	0.5
	Longnose Sucker	n/a	0.0	n/a	0.0	n/a	n/a	7.2	n/a	2.0	2.0	0.5	0.3	0.4	0.8	0.7	0.3	0.2
	Slimy Sculpin	n/a	0.0	n/a	0.0	n/a	n/a	0.1	n/a	0.1	0.3	0.1	0.0	0.0	0.1	0.1	0.1	0.2
	Central Mudminnow	n/a	0.0	n/a	0.0	n/a	n/a	0.0	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Below Ramsay	Westslope Cutthroat Trout	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Brook Trout	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Longnose Sucker	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Slimy Sculpin	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Central Mudminnow	n/a	n/a	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Below German Gulch	Westslope Cutthroat Trout	n/a	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.9	0.8	0.4	n/a

	Rainbow Trout	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	n/a
	Brook Trout	n/a	0.0	0.1	0.0	1.6	0.0	0.1	0.1	1.5	0.1	0.2	1.0	0.6	0.7	0.3	0.4	n/a
	Longnose Sucker	n/a	0.0	0.1	0.0	0.0	0.1	0.5	0.5	1.8	1.9	0.3	2.1	0.3	0.8	0.2	0.1	n/a
	Slimy Sculpin	n/a	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.7	0.2	0.0	0.3	0.1	2.3	1.8	0.8	n/a
	Central Mudminnow	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a
Fairmont	Westslope Cutthroat Trout	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.7
	Rainbow Trout	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
	Brook Trout	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.6
	Longnose Sucker	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3
	Largescale sucker	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.1
	Slimy Sculpin	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.2
	Central Mudminnow	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
Above Highway 1	Westslope Cutthroat Trout	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.1	0.2	0.3	0.1	0.1	0.5	0.6	0.1
	Rainbow Trout	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2
	Brook Trout	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0	0.1	0.0	0.1	0.3	0.3	0.5	0.0
	Longnose Sucker	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.7	0.1	0.0	0.1	0.1	0.0	0.0	0.1
	Slimy Sculpin	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.9	0.4	3.3	0.5	1.8	0.3	0.5	1.8
	Central Mudminnow	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

6.3.3 Spring Fish Sampling - 2014

Six electrofishing sections were surveyed on March 28, 2014. Sections sampled included Father Sheehan Park, Lower Area One, Rocker, Ramsay, Below German Gulch, and Above Highway 1 [Figure 6-1; Table 6-1]. Table 6-4 contains CPUE values from all of the sections sampled in March 2014.

At the Father Sheehan Park section, one 1,978 second electrofishing pass was made through the 656 foot section. In this pass, 111 brook trout (mean total length [TL]: 175 mm; TL range: 65-290 mm) and 18 slimy sculpin were captured. Brook trout density was relatively high [Table 6-4], but not quite as high as the most recent fall samples [Table 6-3]. This reach of the stream is important spawning habitat for brook trout (a fall spawning fish) and it is likely that more fish are present in this reach in the fall as fish migrate to this location to spawn. Sculpin density at the Father Sheehan Park section was within the range previously observed, but was on the lower end of that range. Longnose sucker density has never been overly high in the Father Sheehan Park section, but the spring sample in 2014 was the first time that none were captured in the sample site [Table 6-3]. No central mudminnow were observed, similar to the previous year. Central mudminnow catch-per-unit-effort showed a decline for six straight years prior to not capturing any in 2013 [Table 6-3]. The apparent disappearance of this nonnative species from the sample section is not well understood, but may be due to the high trout density in the section. It is likely that brook trout compete with and prey on smaller species such as sculpin and central mudminnow.

At Lower Area One, the historic electrofishing section was still impounded by beaver dams. Because the original section was not able to be sampled, the section established in 2012 (which was moved downstream slightly to a reach less impacted by beaver activity) was sampled again. The length of the section sampled was approximately 700 feet. One 1,701 second electrofishing pass was made through the reach, which yielded 17 brook trout (mean TL: 276 mm; TL range: 196-337 mm), 27 longnose sucker (mean TL: 153 mm; TL range: 52-238 mm), and 38 slimy sculpin. The brook trout catch was within the observed range from previous years (fall samples), and was relatively low overall [Table 6-4]. Sculpin continued to be relatively common, but CPUE did appear lower than the previous two fall samples [Table 6-4]. Sucker density was within the range of variability observed for the section since sampling began in 2005 [Table 6-4].

At the Rocker section, one 1,114 second electrofishing pass netted 34 longnose suckers (mean TL: 176 mm; TL range: 111-250 mm), as well as 10 westslope cutthroat trout, one brook trout (362 mm TL), and one sculpin. Species composition and overall presence in the reach was similar to previous years (when compared to fall samples). Although CPUE for westslope cutthroat trout was the highest on record since the species was first observed in 2010 (fall sample), overall fish numbers were still relatively low [Table 6-4]. Sucker density, while within the range of variability, was on the lower end of that range, and was much lower than the previous four years of fall samples [Table 6-4]. Causes for this reduction are poorly understood at this time. Sculpin density has always been low during fall samples at the Rocker section, and the spring 2014 sample showed no deviation from this pattern [Table 6-4].

At the Ramsay section, one 1,285 second electrofishing pass was made through the 1,000 foot sample reach. Westslope cutthroat trout were the most abundant fish in the section [Table 6-4]. The survey turned up 14 cutthroat trout (mean TL: 273 mm; TL range: 153-340 mm), four brook trout (mean TL: 228 mm; TL range: 150-296 mm), four longnose suckers (mean TL: 146 mm; TL range: 98-207 mm) and one slimy sculpin. Westslope cutthroat trout were first documented in the Ramsay section in 2008 and have maintained a presence during fall sampling every year since [Table 6-4]. The CPUE observed in spring 2014 for cutthroat trout was similar to what was observed the previous fall, which was the highest on record [Table 6-4]. However, it is important to note that actual numbers of fish have continued to be relatively low in all years and slight differences should not be over-analyzed. In general, fish density continues to be low in the Ramsay section despite this stream reach having been remediated in 2005.

At the German Gulch section, 2,297 seconds of electrofishing netted 10 westslope cutthroat trout (mean TL: 307 mm; TL range: 72-411 mm), eight brook trout (mean TL: 292 mm; TL range: 144-370 mm), three longnose suckers (mean TL: 158 mm; TL range: 137-185 mm), and 19 slimy sculpin. Species composition and general presence in the reach was similar to previous fall samples [Table 6-4]. Overall, fish density in the reach continued to be relatively low. The section remained un-remediated at the time of sampling in the spring of 2014. The reach was undergoing remediation at the time of the fall sample, and was unable to be surveyed at that time.

Spring 2014 sampling in the Above Highway One section turned up two westslope cutthroat trout (250 and 285 mm TL), eight rainbow trout (mean TL: 297 mm; TL range: 280-315 mm), seven brook trout (mean TL: 302 mm; TL range: 155-373 mm), and seven slimy sculpin. The single electrofishing pass through the section took 1,286 seconds. While rainbow trout and brook trout CPUE was the highest on record when compared to previous fall samples [Table 6-4], overall fish density in the reach continued to be low. This reach was remediated in 2012.

Table 6-4. Catch-per-unit-effort for species sampled in six sections of Silver Bow Creek, March 2014.

Section	Fish captured (per 100 seconds effort)						
	Westslope Cutthroat Trout	Brook Trout	Rainbow Trout	Long-nose Sucker	Large-scale Sucker	Slimy Sculpin	Central Mud-minnow
Father Sheehan Park	0	5.61	0	0	0	0.91	0
Lower Area One	0	1.00	0	1.59	0	2.23	0
Rocker	0.90	0.09	0	3.05	0	0.09	0
Ramsay	1.09	0.31	0	0.31	0	0.08	0
Below German Gulch	0.44	0.35	0	0.13	0	0.83	0
Above Highway 1 Bridge	0.16	0.54	0.62	0	0	0.54	0

6.3.4 Fall Fish Sampling - 2014

Six electrofishing sections were surveyed on October 7, 2014. Sections sampled included Father Sheehan Park, Lower Area One, Rocker, Ramsay, a new section established near Fairmont (Fairmont section), and the Above Highway 1 section. As has been stated previously in this report, the German Gulch section was undergoing remediation at the time of the fall sample and was unable to be surveyed. Table 6-5 contains CPUE values from all of the sections sampled in October 2014. Table 6-3 contains a summary of CPUE for all sections sampled from 2002-2014.

At the Father Sheehan Park section, one 2,931 second electrofishing pass was made through the 656 foot section. In this pass, 213 brook trout (mean TL: 188 mm; TL range: 64-386 mm) were captured. Similar to previous fall samples, brook trout were abundant [Table 6-3], and many of the fish captured were large adults that were spawning. As has been stated in previous sections and reports, this reach of the stream is an important spawning location for brook trout in upper Silver Bow Creek and lower Blacktail Creek. The most notable finding in the fall sample in the Father Sheehan Park section was the lack of other species observed. Typically a few longnose suckers and sculpin are collected, but densities have tended to be relatively low and showing somewhat of a declining trend over the past couple years. Causes for this pattern are not well understood, but the high trout density in the section may have something to do with it. It is likely that brook trout compete with and prey on these species. Additionally, high trout density may cause survey staff to more heavily target trout rather than non-salmonids that are often smaller and more obscure.

At Lower Area One, a single 1,600 second electrofishing pass was made through the section. This effort yielded one westslope cutthroat trout (357 mm TL), six brook trout (mean TL: 262 mm; TL range: 228-293 mm), two longnose suckers (50 mm and 95 mm TL), and one central mudminnow. Sculpin were also found to be common in the section similar to past years, but the species was not targeted by the survey crew during the sample. The occurrence of a westslope cutthroat trout at Lower Area One was not new as the species has occasionally shown up in the section since first observed in 2009 [Table 6-3]. The brook trout catch appeared similar to the previous several fall samples and was relatively low overall [Table 6-3]. The spring catch at this site was higher, but still relatively low [Table 6-3]. Sucker density was noticeably low compared to many previous samples, and was actually the lowest on record for the section since sampling began in 2005 [Table 6-3].

At the Rocker section, one 1,246 second electrofishing pass netted 65 longnose suckers (mean TL: 178 mm; TL range: 54-246 mm), as well as one brook trout (196 mm TL). Overall, this pattern was similar to recent fall samples, although sucker density appeared to be down from the previous several years [Table 6-3]. While sucker CPUE in the fall sample was higher than the spring, it was still less than half of what had been observed the previous four years or so [Table 6-3]. Trout density has been traditionally very low in the Rocker section during fall samples, but the lack of cutthroat trout in the sample was somewhat interesting given that the spring sample showed CPUE for the species to be the highest on record [Table 6-3]. Based on past radio-telemetry work completed by MFWP, it is known that many cutthroat migrate out of

this reach in the spring and don't return until the fall. It is possible that cutthroat had not returned in any great numbers at the time of our early October sample.

At the Ramsay section, one 1,304 second electrofishing pass was made through the 1,000 foot sample reach. Westslope cutthroat trout were the most abundant fish in the section [Table 6-5]. The survey turned up ten cutthroat trout (mean TL: 307 mm; TL range: 250-370 mm), six brook trout (mean TL: 193 mm; TL range: 113-262 mm), one rainbow trout (291 mm TL), three longnose sucker (mean TL: 75 mm; TL range: 50-121 mm), two slimy sculpin, and one central mudminnow. While westslope cutthroat trout have continued to have a presence in the Ramsay section since the species was first observed in 2008, fish numbers continue to be relatively low despite this stream reach having been remediated in 2005 [Table 6-3]. The most significant finding of the 2014 fall survey in the Ramsay section was the presence of a single rainbow trout. While it is not the first time a rainbow trout has been observed in Silver Bow Creek, it is definitely the farthest upstream one has been documented. The presence of this species is not desirable given the potential for rainbow trout to hybridize with native westslope cutthroat trout. The intent of the fish barrier constructed in Silver Bow Creek in the fall of 2014 in Durant Canyon near Fairmont is to prevent rainbow trout and other competitor species from invading upper Silver Bow Creek and hampering the recovery efforts for westslope cutthroat trout. While a single individual poses minor risk, further monitoring and removal efforts may be required to be sure the species is not present in greater numbers than originally believed. One thing worth noting is that the only known source of rainbow trout in Silver Bow Creek is the Warm Springs Ponds. Rainbow trout are stocked into the ponds on an annual basis, but for the last seven years, only sterile fish have been used. It is likely that most of the rainbow trout present in Silver Bow Creek at this time are not capable of reproducing.

In order to monitor species composition and relative abundance downstream of the Silver Bow Creek fish barrier constructed in 2014, a new fish sampling section was established near Fairmont during the fall sample period. The reach sampled had already undergone remediation several years prior to being surveyed. One 1,790 second electrofishing pass was made through the 902 foot section. This effort yielded 12 westslope cutthroat trout (mean TL: 241 mm; TL range: 129-353mm), 11 brook trout (mean TL: 167 mm; TL range: 105-256 mm), five longnose suckers (mean TL: 156 mm; TL range: 95-192 mm), two largescale suckers (175 mm and 242 mm TL), and three slimy sculpin. Overall, fish density appeared relatively low throughout the reach [Table 6-5]. However, habitat in the section was fairly good and consisted of a number of deep pools as well as shallower riffles and channel splits.

Fall sampling in the Above Highway One section in 2014 turned up three westslope cutthroat trout (mean TL: 218 mm; TL range: 150-274 mm), one rainbow trout (285 mm TL), one longnose sucker (178 mm TL), and 30 slimy sculpin. The single electrofishing pass through the section took 1,657 seconds. Overall, fish density appeared low [Table 6-3]. While rainbow trout and brook trout CPUE was the highest on record during the spring sample in 2014, neither species was well represented in the fall sample. The cause for their relative absence in the fall sample is not completely understood, but could simply be an artifact of low fish density and limited sample effort. The Above Highway One section was remediated in 2012.

Table 6-5. Catch-per-unit-effort for species sampled in six sections of Silver Bow Creek, October 2014.

Section	Fish captured (per 100 seconds effort)						
	Westslope Cutthroat Trout	Brook Trout	Rainbow Trout	Long-nose Sucker	Large-scale Sucker	Slimy Sculpin	Central Mud-minnow
Father Sheehan Park	0	7.27	0	0	0	0	0
Lower Area One	0.06	0.38	0	0.38	0	0	0.06
Rocker	0	0.08	0	5.21	0	0	0
Ramsay	0.77	0.46	0.08	0.23	0	0.15	0.08
Fairmont	0.67	0.61	0	0.28	0.11	0.17	0
Above Highway 1 Bridge	0.18	0	0.06	0.06	0	1.81	0

6.3.5 Streamflow – 2014

Daily streamflow (provisional values from USGS) in Silver Bow Creek during the spring sampling effort (March 2, 2014) was 26 cfs at the USGS gauge station below Blacktail Creek (USGS 12323250), and 55 cfs at the USGS gauge station at Opportunity (USGS 12323600). During the fall sample (October 7, 2014), streamflows were 27 cfs at the USGS gauge station below Blacktail Creek, and 38 cfs at the USGS gauge station at Opportunity. In general, 2014 was an average to above average streamflow year for Silver Bow Creek. Mean monthly streamflow in the stream below Blacktail Creek was highest during May at 48.3 cfs, which was about 16.3 cfs higher than the period-of-record (POR) average for the same month. Streamflow in Silver Bow Creek in 2014 peaked earlier than usual, as typically June is the highest streamflow month. In 2014 mean monthly streamflow in June below Blacktail Creek was 33.8 cfs. This was only about 1.2 cfs below the POR average. Although all USGS streamflow data was not finalized for publication at the time this report was written, mean monthly streamflow appeared lowest at the USGS gauge station below Blacktail Creek during July at 18 cfs. The POR average streamflow for this location and month was 21 cfs. Mean monthly streamflow at the USGS gauge station at Opportunity was also highest in May at approximately 151.3 cfs; about 50.3 cfs higher than the period-of-record average. Mean monthly streamflow at this site appeared lowest in August at approximately 34.7 cfs; 6.7 cfs above the POR average for the same month.

6.3.6 Stream Temperature – 2014

Water temperature was monitored at four locations along Silver Bow Creek, as well as at one location in lower Blacktail Creek, through the summer of 2014. All stream temperature recordings were collected using continuously logging thermographs (Hobo Water Temp Pro v2) set to collect measurements every 30 minutes. In Silver Bow Creek, the monitoring sites were located above Rocker, at Miles Crossing, below German Gulch, and near Opportunity. In Blacktail Creek, the site was situated within Father Sheehan Park above the confluence with

Basin Creek. All thermographs were operated from May 24 through October 13, 2014. At the lower Blacktail Creek site, daily high temperature exceeded 15 C on only 10 days. The maximum daily temperature at this site was 16.5 C recorded on August. In Silver Bow Creek, at the site above Rocker, maximum daily water temperature exceeded 15 C on 82 days, but never rose above 20 C. The maximum recorded temperature at this site was 18.7 C on July 8. At Miles Crossing, maximum daily temperature exceeded 15 C on 101 days including 34 days in which it exceeded 20 C. The maximum recorded temperature was 23.5 C on July 8. At the site below German Gulch, maximum daily temperature exceeded 15 C on 84 days, and 20 C on 36 days. Maximum recorded temperature at this site was 22.3 C on July 29. Near Opportunity, daily high temperatures exceeded 15 C on 105 days, and 20 C on 52 days. The maximum daily temperature at this site was 25.7 C recorded on August 1.

6.4 DISCUSSION

Sampling described in this report represents the continuation of annual fish monitoring in Silver Bow Creek, which was initiated in 2002. Prior to 2002, fish sampling in the upper Silver Bow Creek watershed was primarily confined to tributaries such as Blacktail Creek and German Gulch. Silver Bow Creek was generally considered to be devoid of fish except for occasional observations of suckers during the late 1990s when remediation of the stream channel began. Fish sampling in Silver Bow Creek has been conducted to provide a general perspective of fish response to ongoing remediation activities in Silver Bow Creek, as well as to other environmental factors. Since sections have been sampled using relatively low effort sampling techniques, interpretation of results should be limited to observations of major trends in fish species composition and abundance. Sampling conducted in this effort is sufficient to determine if a sampling reach was fishless for one or more years, followed by colonization by tolerant species such as suckers and sculpin, and then followed by colonization of sensitive species such as trout. Fluctuations in fish abundance or species composition at specific sampling locations should not be considered overly significant unless a large change or multi-year trend is observed.

The presence or absence of various fish species among the sample sections in Silver Bow Creek provides insight into changes in water quality along the longitudinal gradient of the stream. Because of their sensitivity to poor water quality, trout are good to examine for distributional changes over time. Brook trout are common in upper Silver Bow Creek at Father Sheehan Park as well as in German Gulch and Browns Gulch. Fish in each of these areas have access to downstream reaches of Silver Bow Creek that provide relatively similar physical habitat types. However, prior to 2007, no brook trout were captured during fall sampling in sections downstream of Father Sheehan Park (e.g., Lower Area One, Rocker, and Ramsay), except for one individual captured below the confluence of German Gulch in 2006. It can be reasonably assumed that water quality deterioration downstream of Father Sheehan Park was the primary reason for the absence or rarity of trout in downstream reaches of Silver Bow Creek. In fall 2007, brook trout were found in two reaches where they had previously not been documented. Three brook trout were captured at the Lower Area One section, and one brook

trout was captured at the Ramsay section. Since 2007, brook trout have been documented in at least one or more sampling years at all of the current sampling sections. While this is an improvement over the past, fish density downstream of Butte still continues to be low.

In addition to brook trout, native westslope cutthroat trout are also beginning to be detected with relative frequency in Silver Bow Creek. Westslope cutthroat trout are most common in German Gulch, but also occur in lower densities in upper Browns Gulch as well as upper Blacktail Creek. Prior to 2008 westslope cutthroat trout had only been observed in Silver Bow Creek just downstream of German Gulch. And, the first fall presence of the species in this area was not described until 2007. In 2008, one of the most interesting findings of the fall monitoring was the appearance of westslope cutthroat trout in the Ramsay section. While it was only two individuals, both were relatively large in size. In 2009, westslope cutthroat trout continued to be present in the Ramsay section (four individuals were collected), and a single individual was also captured in the Lower Area One section. In 2010 and 2011, westslope cutthroat trout were present in a majority of the sections sampled, including the Rocker section where trout were not observed until 2010. In 2012 the species was only found in the sections below German Gulch and at Ramsay, but in 2013 and 2014 it was again observed in a majority of sample sections. While westslope cutthroat trout density remains relatively low throughout Silver Bow Creek, the continued presence of this species is a positive sign. The current limiting factors for cutthroat trout in remediated areas of Silver Bow Creek are most likely related to physical habitat quality, high summer water temperatures, and other water quality concerns that limit the use of mainstem Silver Bow Creek by cutthroat trout during much of the summer and early fall.

While the continued presence or appearance of trout in all of the current monitoring sections in Silver Bow Creek is an improvement over past years when no fish could be detected, the rarity of these species still suggests water quality remains a concern downstream of Butte. At the Rocker section, water quality is impaired by several factors including elevated ammonia levels directly related to the Butte wastewater treatment plant discharge located just upstream. Wastewater discharged directly into Silver Bow Creek from this facility has very high ammonia concentrations and as this ammonia reaches the stream, microbial oxidation creates a reach with limited available oxygen, especially during the summer months. The longitudinal and temporal extent of this condition and its effects on fish species composition and abundance is not completely clear. However, within the Rocker section itself, it is quite apparent that wastewater discharge is affecting the fish community at this site. Although fall sampling in recent years has detected trout in the Rocker section, it should not lessen the significance of the impacts the Butte wastewater treatment plant has on the fish community of upper Silver Bow Creek. Longnose suckers continue to dominate the fish assemblage at this site. Sucker species tend to be more tolerant of a variety of pollutants such as metals, nutrients, low dissolved oxygen, high sediment loading, and elevated water temperatures. It is unlikely we will witness a significant improvement in the health of the fishery of upper Silver Bow Creek until the discharge of the Butte wastewater treatment plant is addressed.

Perhaps one of the most interesting sections that we currently monitor in Silver Bow Creek is the Ramsay section. This section was remediated in 2005 and has now been cleaned up for

approximately eight years. Prior to being remediated, fish sampling in 2003 and 2004 found no fish present. However, in 2006 (post-remediation), longnose suckers were found to have colonized the reach and were in fact, relatively common. Since then, sucker density has continued to decline to the point that in the last several years, only a few juveniles and young-of-the-year fish were collected during fall sampling. In contrast, westslope cutthroat trout have begun to colonize the reach, and have been found in the section every year since 2008, with a few more fish usually being observed each year. Despite this, fish densities in this reach are still very low and the reason for this is not completely clear. While it is likely that downstream impacts of the wastewater discharge in Butte continue to impact this segment of Silver Bow Creek, it is unknown why longnose suckers continue to be so rare when they are very common in the Rocker section, which is closer to the discharge point. Another factor that may help to describe fish distribution patterns at the Ramsay section is summer stream temperature. Temperature monitoring over the last several years in Silver Bow Creek above Rocker and at Miles Crossing (just below the Ramsay section) showed noticeable differences in the two reaches in terms of the number of days stream temperature rose above 20 C, a value often considered to be near the upper limit tolerated by many trout species. Typically, stream temperatures in excess of 20 C are stressful and potentially deadly to trout and other coldwater fish species. During the last six summers, maximum daily stream temperatures only rose above 20 C an average of 10 days at the Rocker section. However, farther downstream at Miles Crossing (near the Ramsay section), stream temperature rose above 20 C an average of 45 days. Prolonged exposure to high stream temperatures in conjunction with low oxygen levels created by the nitrification of ammonia, may be leading to increased fish mortality or avoidance in this reach during the summer months.

In short, it is clear that there are multiple factors affecting fish use and survival in Silver Bow Creek. Only continued monitoring and more in-depth research will begin to answer some of these questions.

6.5 RECOMMENDATIONS AND ADDITIONAL STUDIES

Continued monitoring of the established electrofishing sections in Silver Bow Creek remains one of the best ways to assess fish response to ongoing remediation and restoration efforts as well as other factors such as drought and nutrient loading. Fish sampling in all of the current sections should be repeated annually. Additionally, sampling at alternate times of year, as was completed in 2014, may also be valuable to detect seasonal differences in fish distribution and abundance.

Seasonal fish movements throughout the Silver Bow Creek watershed may result in problems interpreting trends with fish populations. Electrofishing surveys during the fall provide a snapshot of the fishery status during a specific point in time, but fish mortality during one season may be masked by fish migration during another. A fish tagging and movement study would provide beneficial information on how fish are utilizing and moving in the Silver Bow Creek watershed. A study of this sort began in the summer of 2009. A graduate student from Montana State University (Joe Naughton) conducted the study with assistance from

Montana Fish, Wildlife and Parks and the Natural Resource Damage Program. During this study, several thousand fish (including brook trout, westslope cutthroat trout, and longnose suckers) were tagged with passive integrated transponder (PIT) tags, and multiple antenna stations were set up to record fish movement. Fish were collected and tagged in the mainstem of Silver Bow Creek from below German Gulch all the way upstream to the confluence with Blacktail Creek. Additionally, a number of fish were tagged in the lower reaches of the more significant tributaries such as German Gulch, Browns Gulch, and Blacktail Creek. The summarization of this research was described in a M.S. thesis [Naughton, 2013].

In addition to the graduate research project mentioned above, Montana Fish, Wildlife and Parks initiated a small-scale radio-telemetry project in the spring of 2012 and continued to tag new fish in 2013. We captured and radio-tagged mostly adult westslope cutthroat trout as well a few adult brook trout from the mainstem of Silver Bow Creek between Rocker and Miles Crossing. We followed the movements of these fish on a weekly basis during the spring, summer and fall. We learned that mortality of fish in the mainstem of Silver Bow Creek appears to be high. Many of the fish tagged died at some point after tagging. While several of these fish likely died due to post-tagging complications, others died from water quality issues and others from predation (mostly avian). One notable finding from the 2012 and 2013 telemetry work was the movement of a number of westslope cutthroat trout into the German Gulch drainage to spawn and over-summer. German Gulch was the most used tributary by cutthroat trout during this study. Additionally, normal tributary monitoring work has documented the use of lower German Gulch by high numbers of adult fish during the summer period. It is likely that most of these fish are seeking thermal and oxygen refuge (cold and well oxygenated water) due to poor water quality conditions in mainstem Silver Bow Creek.

7.0 GEOMORPHOLOGY

7.1 INTRODUCTION

Geomorphology monitoring was performed in Subareas 1 and 2 of the Streamside Tailings Operable Unit (SSTOU) in 2014 to evaluate conditions in the stream channel compared to project reference values and to assess potential ongoing maintenance needs. This chapter describes geomorphic monitoring activities in the SSTOU in 2014. Monitoring is conducted at each site five and ten years after remediation was completed. In 2014, monitoring was conducted at four sites: one of which was in Subarea 1 (SS-10A) and three of which were in Subarea 2 (SS-10B, SS-13, and SS-14D) [Figure 7-1]. Monitoring at site SS-10A and SS-10B was conducted for the second time and represents conditions ten years after remediation. Monitoring at site SS-13 and SS-14D was conducted for the first time and represents conditions five years after remediation. Specific parameters at each site were compared to geomorphic reference values as described in the long-term monitoring plan for Silver Bow Creek [MDEQ and NRDP, 2004].

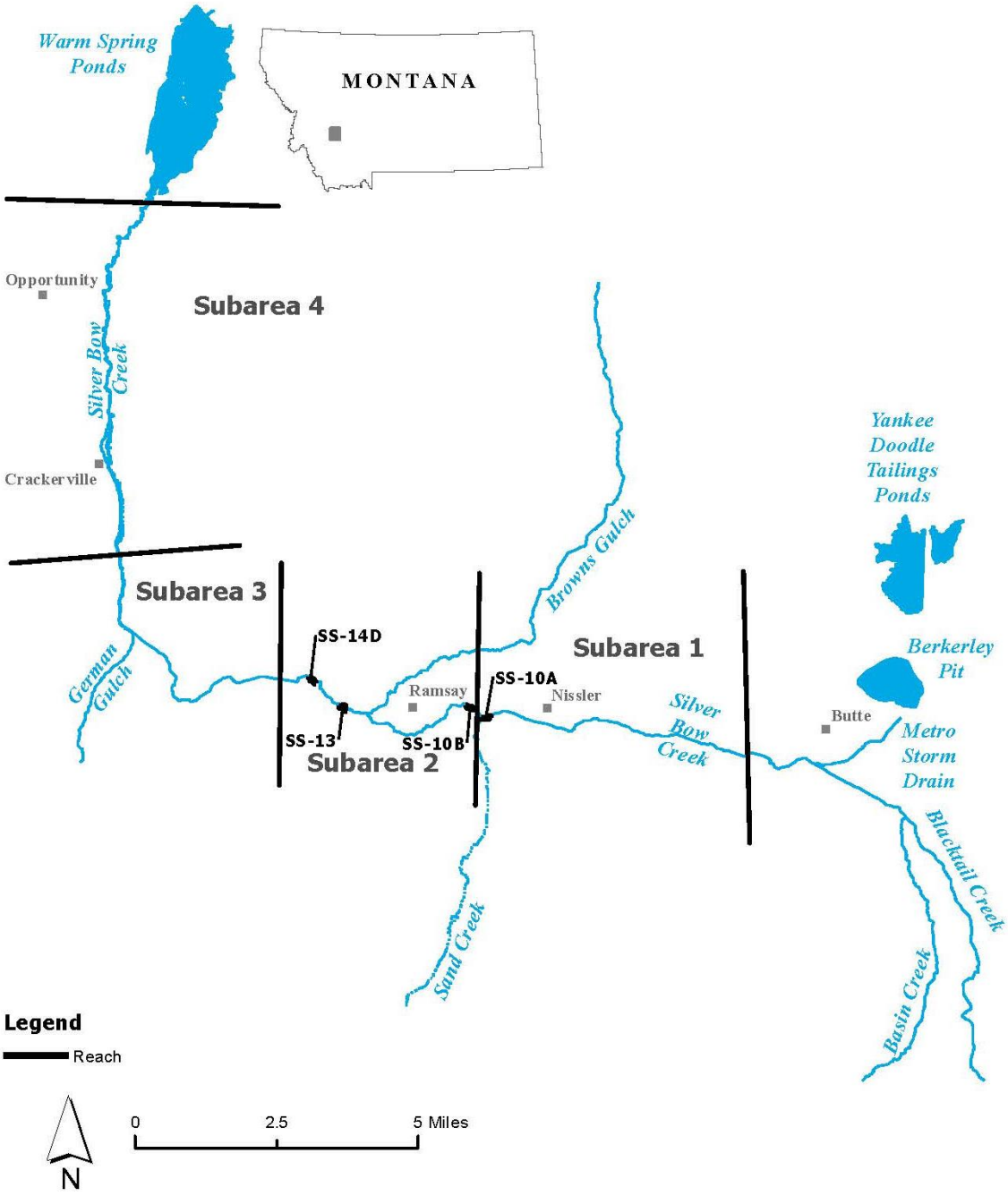

Figure 7-1. Geomorphic monitoring reaches and remedial Subareas in the Streamside Tailings Operable Unit, 2014.

7.2 METHODS

The sampling methods employed in this evaluation were established in an early version of the SSTOU monitoring plan [MDEQ and NRDP, 2004] and are outlined in the most recent annual update to the project sampling and analysis plan [Naughton et al., 2014a]. These methods were largely derived from components of the environmental monitoring and assessment program (EMAP) protocols developed by the U.S. Environmental Protection Agency to evaluate wadeable streams [Peck et al., 2001].

7.2.1 Monitoring Locations

Geomorphic monitoring was conducted at four monitoring sites on Silver Bow Creek in 2014: SS-10A, SS-10B, SS-13, and SS-14D [Figure 7-2]. Monitoring site SS-10A is located immediately upstream of the confluence with Sand Creek and monitoring site SS-10B is located immediately downstream of the confluence of Sand Creek. Monitoring site SS-13 is located approximately one mile upstream of the Miles Crossing road crossing and monitoring site SS-14D is located immediately upstream of the Miles Crossing road crossing.

At each monitoring site, a 1,000-foot monitoring reach was established and geomorphic channel characteristics were described within each reach. Based on the methodological precedent from prior monitoring in the SSTOU, monitoring sites are to extend from the surface water sampling site (upstream end) [Figure 7-2] approximately 1,000 feet downstream. At sites SS-10A and SS-10B, a previous monitoring reach had been established and monitoring in 2014 was conducted within that same reach. At sites SS-13 and SS-14D, no prior monitoring had occurred and new monitoring reaches were established at each site. The monitoring reach at SS-14D extended approximately 1,000 feet downstream beginning from surface water monitoring site SS-14D [Figure 7-2]. At SS-13, a sampling reach was established upstream from the SS-13 surface water monitoring site in order to avoid extending the monitoring reach through a road culvert [Figure 7-2].

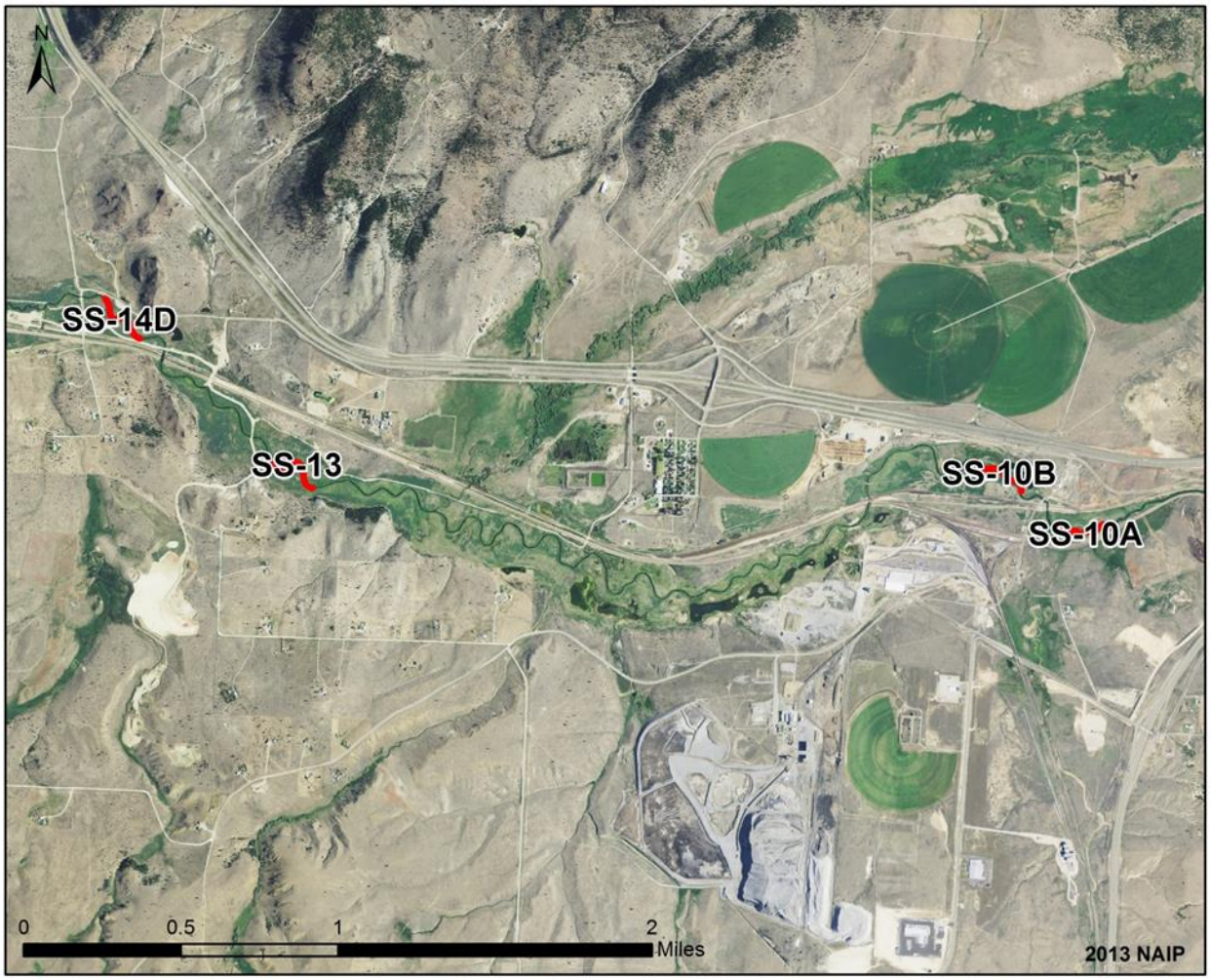

Figure 7-2. Geomorphic monitoring locations for the Streamside Tailings Operable Unit, 2014.

7.2.2 Monitoring Schedule

Based on the monitoring program guidelines, geomorphic monitoring occurs at each monitoring site initially after five years have elapsed since remediation was completed and again after ten years [MDEQ and NRDP, 2004]. As of 2014, monitoring has been conducted in all Subarea 1 and 2 monitoring sites but not in any Subarea 3 or 4 monitoring sites [Table 7-1]. Monitoring in 2014 was conducted for the second time (i.e., ten year post-remediation monitoring) at sites SS-10A and SS-10B and for the first time (i.e., five year post-remediation monitoring) at sites SS-13 and SS-14D [Table 7-1]. For 2014 monitoring, all field data was collected from August 18-19, 2014.

Table 7-1. Geomorphic monitoring schedule for the Streamside Tailings Operable Unit. Sites are to be monitored at five year intervals after remediation has been completed in each associated reach [MDEQ and NRDP, 2004][31].

Subarea	Reach	Sites within Reach	Year remedy completed	Monitoring Scheduled		Monitoring Occurred		Monitored in 2014
				5-Year	10-Year	5-Year	10-Year	
1	A	SS-07	2003	2008	2013	-	2013	
	B	SS-08	2003	2008	2013	2007	2013	
	E	SS-10A	2003	2008	2013	2009	2014	X
2	F	SS-10B	2004	2009	2014	2009	2014	X
	H	SS-11C	2006	2011	2016	2011		
	I	SS-11D	2008	2013	2018	2012		
		SS-13	2008	2013	2018	2014		X
	J	SS-14D	2008	2013	2018	2014		X
3	M	SS-15A	2013	2018	2023			
		SS-15B	2013	2018	2023			
4	P	SS-16B	2010	2016	2021			
	T	SS-17D	2013	2018	2023			
		SS-19	2013	2018	2023			

7.2.3 Monitoring Parameters

Geomorphic monitoring metrics and reference values for those metrics are described in Table 7-2. The monitoring metrics include assessments of pool availability; channel morphology; and the availability of overhead cover for aquatic animals as provided by undercut banks, the riparian canopy, streamside vegetation, and instream wood.

Table 7-2. Reference value for geomorphic monitoring metrics in the Streamside Tailings Operable Unit following Remediation.

Monitoring Metric	Year (post-remediation)	
	5	10
Percent pools (%)	20-50	20-50
Average width to depth ratio	8-14	8-14
Undercut banks (%)	8-20	8-20
Riparian cover; overstory (>5 m) canopy (%)	45-65	45-65
Channel cover (%)	15-35	15-35
Woody debris (%)	15-35	15-35

[31] Some SSTOU monitoring sites (SS-01, SS-05A, SS-06G, SS-15G) are monitored for other environmental media (e.g., surface water) but these sites are located outside the SSTOU. Geomorphology will not be monitored at those sites unless requested by MDEQ.

7.2.4 Sample Collection and Analysis

The following sections describe methods for measurement of each monitoring metric.

7.2.4.1 Percent Pools

At each monitoring site, a longitudinal profile (approximately 1,000 feet length) of the stream bottom at the channel thalweg was surveyed using a survey grade GPS (accuracy ±3 cm). Maximum spacing between survey points (i.e., spatial coordinates including latitude, longitude, and elevation) was 100 feet. Points were spaced more closely where the channel curved, where secondary channels occurred, at substantial slope inflection points within the channel, and at changes in instream habitat features. Instream habitat features were identified visually and describe the geomorphic channel unit character of the stream (i.e., riffle, run, or pool). The proportion of pool habitat (at the channel thalweg) within the overall 1,000 foot thalweg length of the entire survey section was calculated from data collected in the longitudinal profile.

7.2.4.2 Width to Depth Ratio

Channel cross-sections were surveyed at 100 foot intervals (11 cross-sections total including the upstream and downstream end of the survey section) using a survey grade GPS. Cross-sections were labeled A through K starting at the upstream end of each monitoring site. For each cross-section, at least ten points were surveyed within the bankfull channel, including points at the bankfull channel margin, water edge, thalweg, and all substantial slope inflection points within the channel. For each channel cross-section surveyed, the bankfull width and mean bankfull depth were determined and the channel width to depth ratio (the quotient of the bankfull width and mean bankfull depth) was calculated. Cross-section locations in 2014 are displayed for SS-10A [Figure 7-3], SS-10B [Figure 7-4], SS-13 [Figure 7-5], and SS-14D [Figure 7-6].

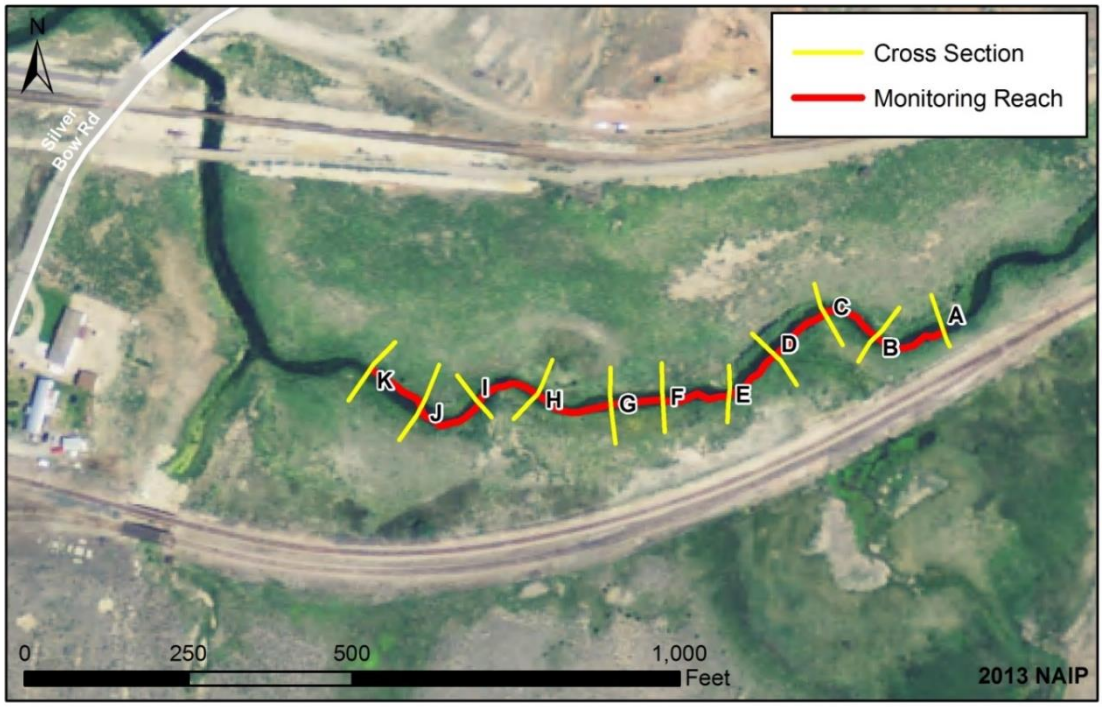

Figure 7-3. Channel cross-section monitoring transects in survey reach SS-10A of the Streamside Tailings Operable Unit, 2014.

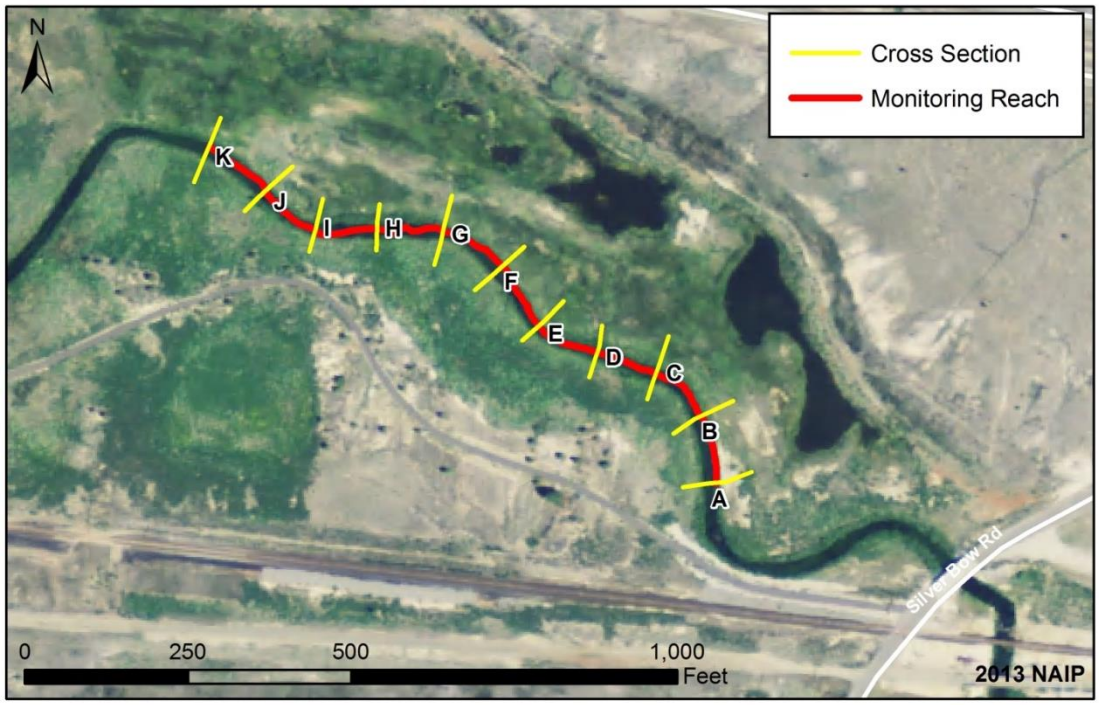

Figure 7-4. Channel cross-section monitoring transects in survey reach SS-10B of the Streamside Tailings Operable Unit, 2014.

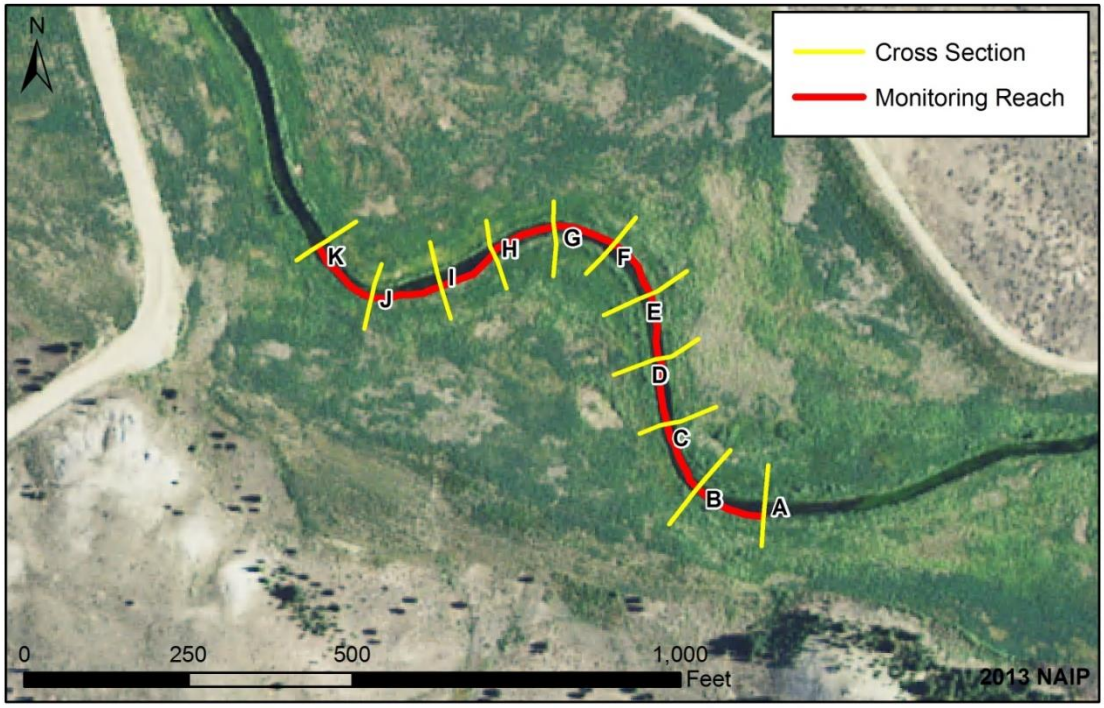

Figure 7-5. Channel cross-section monitoring transects in survey reach SS-13 of the Streamside Tailings Operable Unit, 2014.

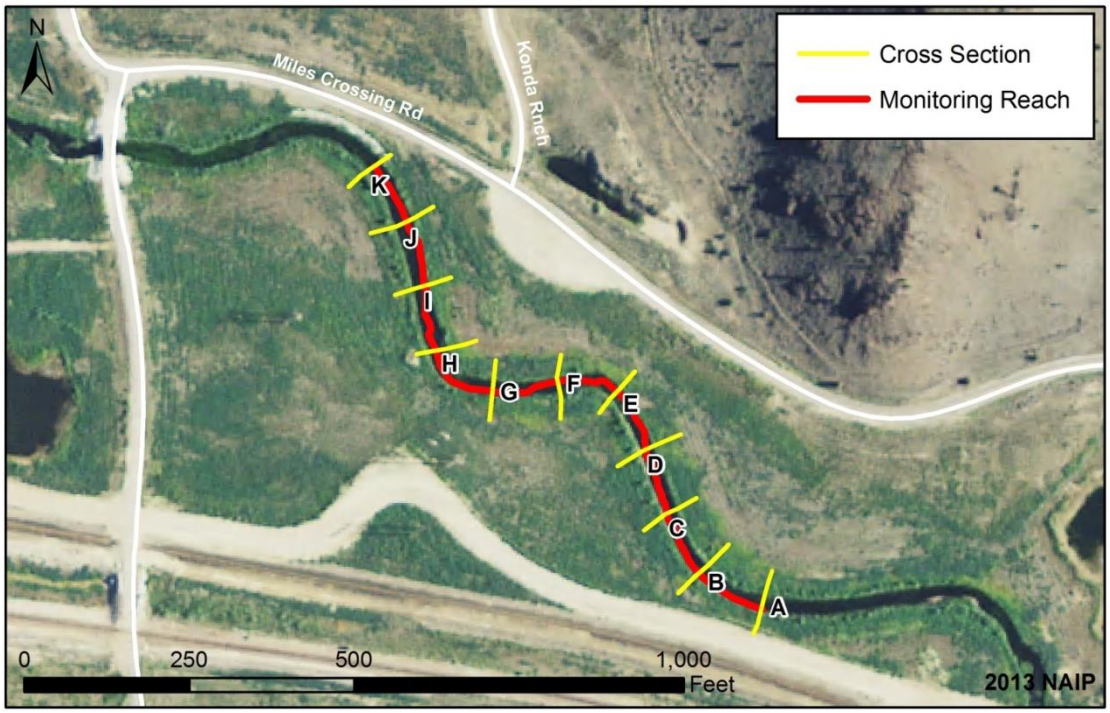

Figure 7-6. Channel cross-section monitoring transects in survey reach SS-14D of the Streamside Tailings Operable Unit, 2014.

7.2.4.3 Undercut Banks

At each cross-section transect, the areal cover of undercut banks was determined by measuring the length and depth of undercut banks along 15 feet to either side of the cross section intersection with each bank. Thus, 30 feet of streambank were evaluated on river right and 30 feet of streambank were evaluated on river left at each transect. The total length of streambank surveyed was 660 feet at the number of discrete survey sections along the streambank was 22 for each reach.

7.2.4.4 Riparian Cover

The proportion of areal cover provided by riparian vegetation was estimated visually in 22 discrete monitoring plots (plot area = 900 square feet) in each monitoring reach. Areal cover over the floodplain was estimated for three types of riparian vegetation: ground (annual vegetation; <0.5m), understory (shrubs and willows; 0.5-5 m), and overstory (trees not including willows; >5 m). Square sample plots were located along the streambanks, centered at each cross-section transect, and extending 30 feet back from the streambanks.

7.2.4.5 Channel Cover

At each of the 11 cross-section transects, the areal cover of overhanging vegetation was measured using a spherical densiometer [Peck et al., 2003]. Six measurements were taken at each of the 11 river transects including measurements at the wetted edge of the right and left banks, and four measurements at the center of stream channel at a height of 1-foot above the surface of the stream. Measurements at the center of the stream channel were made facing upstream, toward the left bank, toward the right bank, and downstream [Peck et al., 2003].

7.2.4.6 Woody Debris

At each of the 11 cross-section transects, the percent of stream channel cover provided by woody debris was estimated within an area extending 15 feet to either side of the cross section along both banks and extending the full width of the stream. Woody debris was defined as having a diameter ≥4 inches on the small end and a length ≥5 feet [Peck et al., 2003].

7.2.5 Data Analysis

For the monitoring metrics described at each of the cross-section transects (i.e., width to depth ratio, undercut banks, overstory canopy cover, overhanging vegetation, and woody debris cover), the mean of all measurements was compared to the reference value [Table 7-2]. The percent of pool habitat was calculated as the proportion of pool length to total channel length within each section.

7.3 RESULTS

7.3.1 Percent Pools

Pools comprised 30-45% of the available channel habitat in the four monitoring reaches of the SSTOU in 2014 [Table 7-3] which falls within the reference value range of 20-50% for the SSTOU [Table 7-2]. Although the total length of pools was relatively similar among the monitoring reaches, pool frequency differed and the number of pools did not appear to be related to the overall number of pools within each reach. For example, in monitoring reach SS-10A, the proportion of the reach length comprised of pool habitat was relatively low (30%) [Table 7-3] but there were a relatively large number (6) of pools identified [Figure 7-7]. By contrast, SS-13 had a relatively large proportion of available pool habitat by length (45%) [Table 7-3] but a relatively low number of pools (3) [Figure 7-7].

During prior monitoring at SS-10A and SS-10B in 2009, the proportional composition of each reach with pool habitat was also within the reference value range [Confluence, 2010b]. All pools identified in the 2014 longitudinal profiles were identifiable in previous longitudinal profiles [Confluence, 2010b].

Table 7-3. Composition of instream feature types within monitoring reaches of the Streamside Tailings Operable Unit, 2014.

Monitoring Reach	Total Length (feet)	Instream Feature	Feature Length (feet)	Reach Proportion (%)
SS-10A	1,025	Riffle	30	3
		Run	685	67
		Pool	310	30
SS-10B	1,027	Riffle	72	7
		Run	566	55
		Pool	389	38
SS-13	1,036	Riffle	159	15
		Run	414	40
		Pool	464	45
SS-14D	1,030	Riffle	107	10
		Run	598	58
		Pool	325	32

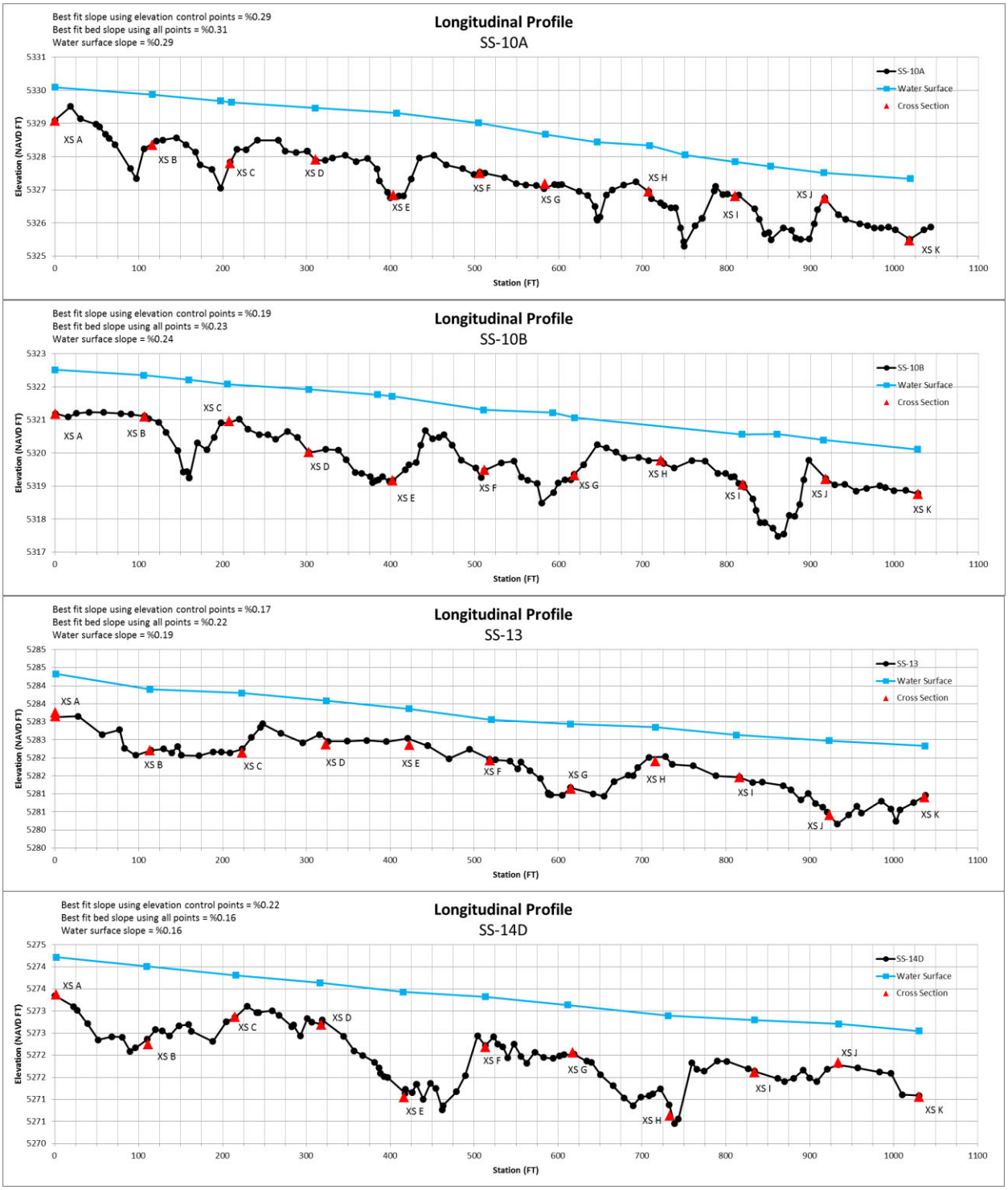

Figure 7-7. Longitudinal profiles of the Silver Bow Creek channel (thalweg) in monitoring reaches of the Streamside Tailings Operable Unit, 2014.

7.3.2 Width to Depth Ratio

Stream channel dimensions and the assumed water elevation at the bankfull stream level within each cross-section are depicted for each monitoring reach: SS-10A [Figure 7-8], SS-10B [Figure 7-9], SS-13 [Figure 7-10], and SS-14D [Figure 7-11]. Within each monitoring reach, mean width to depth ratios ranged from 16.0-19.3 with individual cross-section width to depth ratios ranging from 10.3-24.9 [Table 7-4; Figure 7-12]. The width to depth ratio reference value range is 8-14.

During prior monitoring at SS-10A and SS-10B in 2009, mean width to depth ratios were also above the reference value range, but by a lower degree (14.9 and 14.7 respectively) [Confluence, 2010b] compared to 2014.

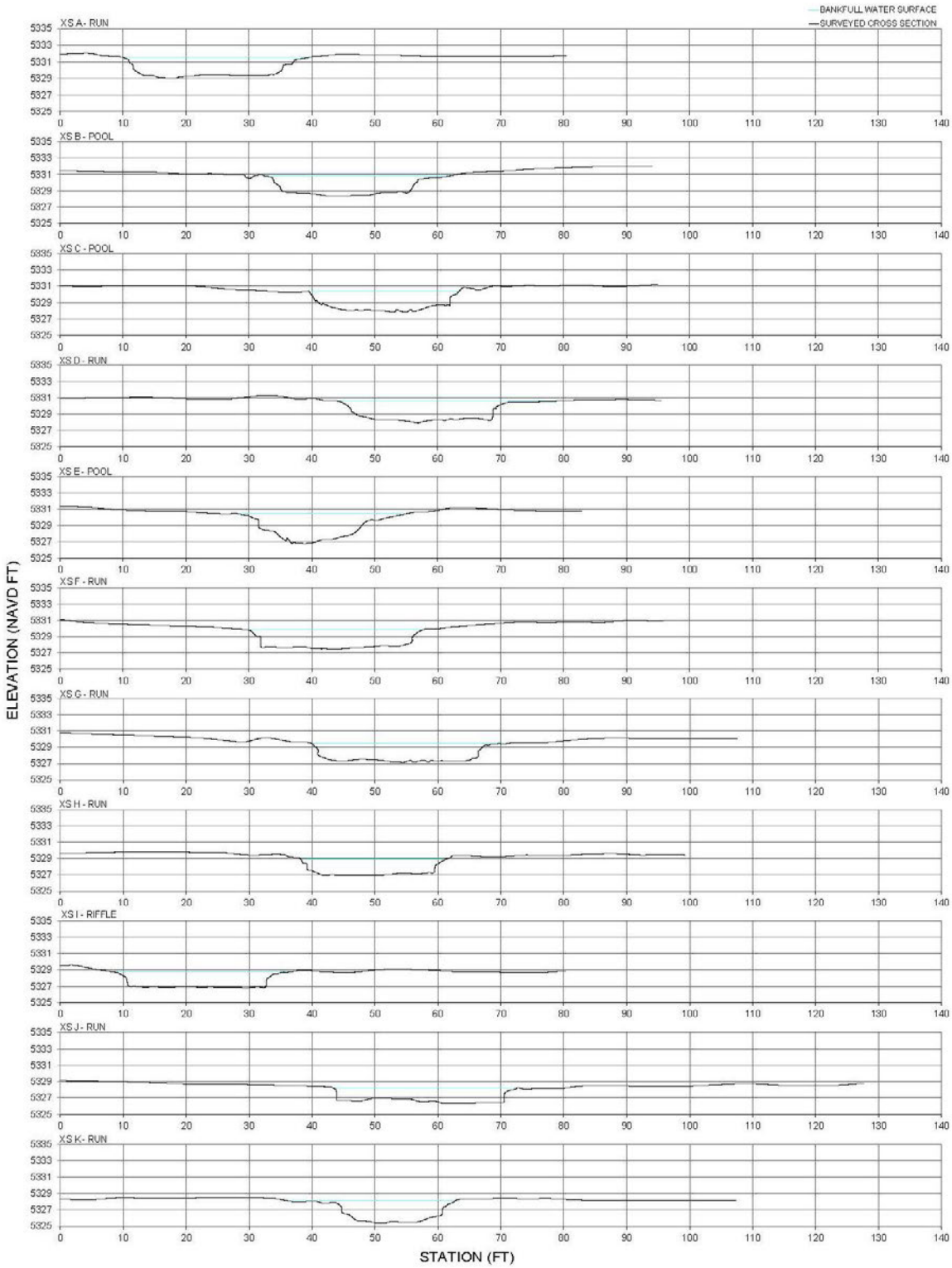

Figure 7-8. Surveyed stream channel cross-sections in reach SS-10A of the Streamside Tailings Operable Unit, 2014.

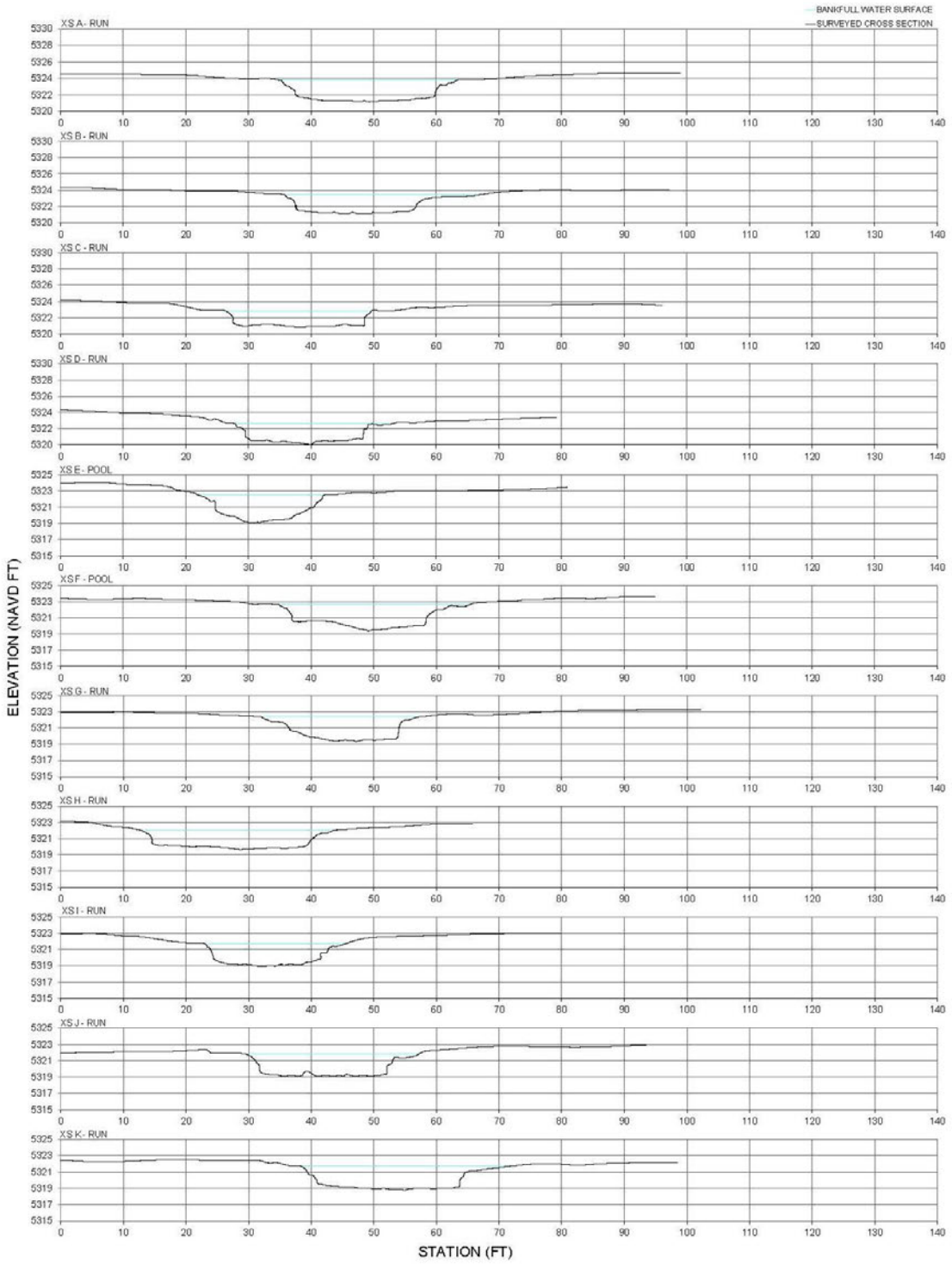

Figure 7-9. Surveyed stream channel cross-sections in reach SS-10B of the Streamside Tailings Operable Unit, 2014.

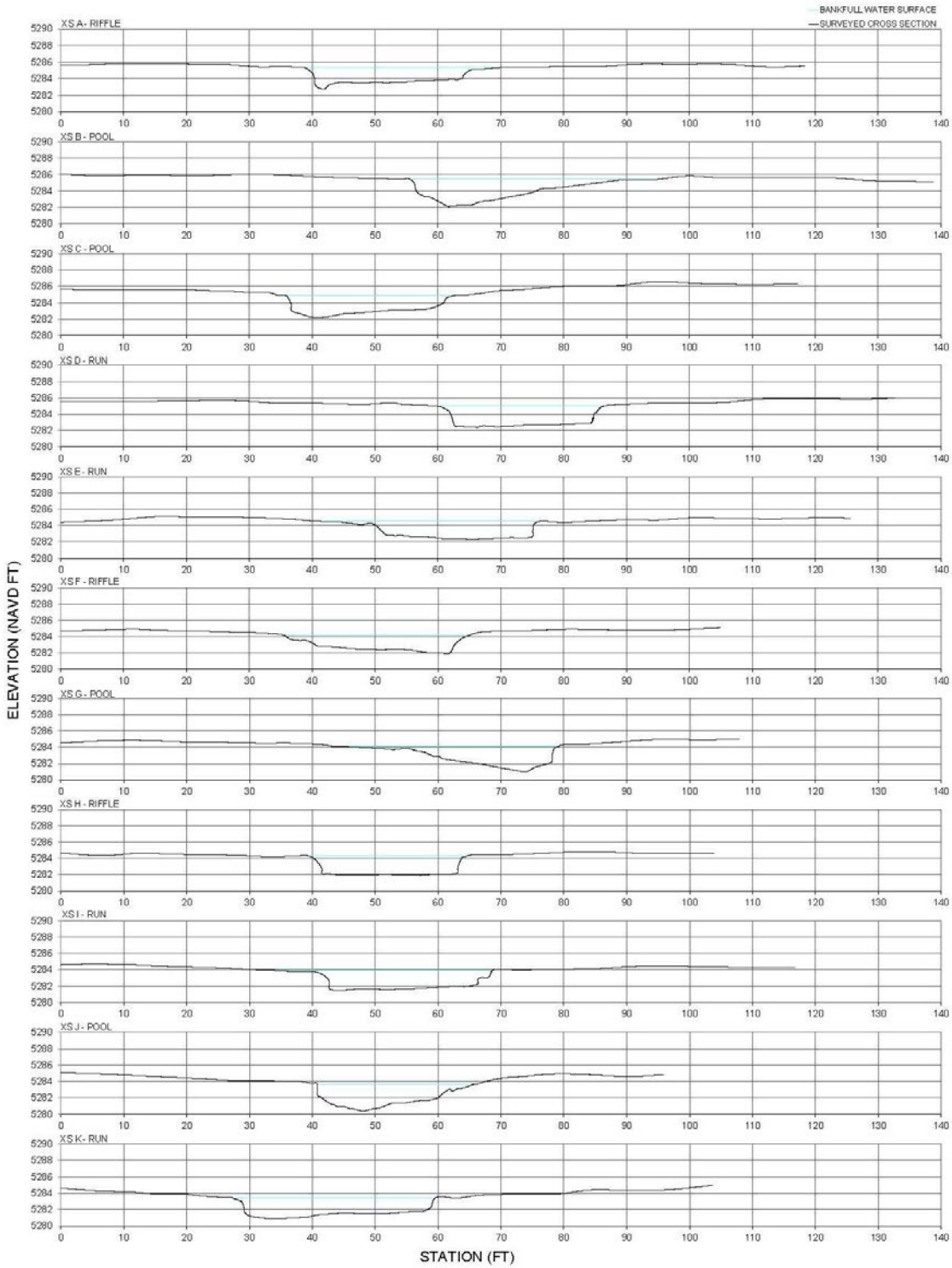

Figure 7-10. Surveyed stream channel cross-sections in reach SS-13 of the Streamside Tailings Operable Unit, 2014.

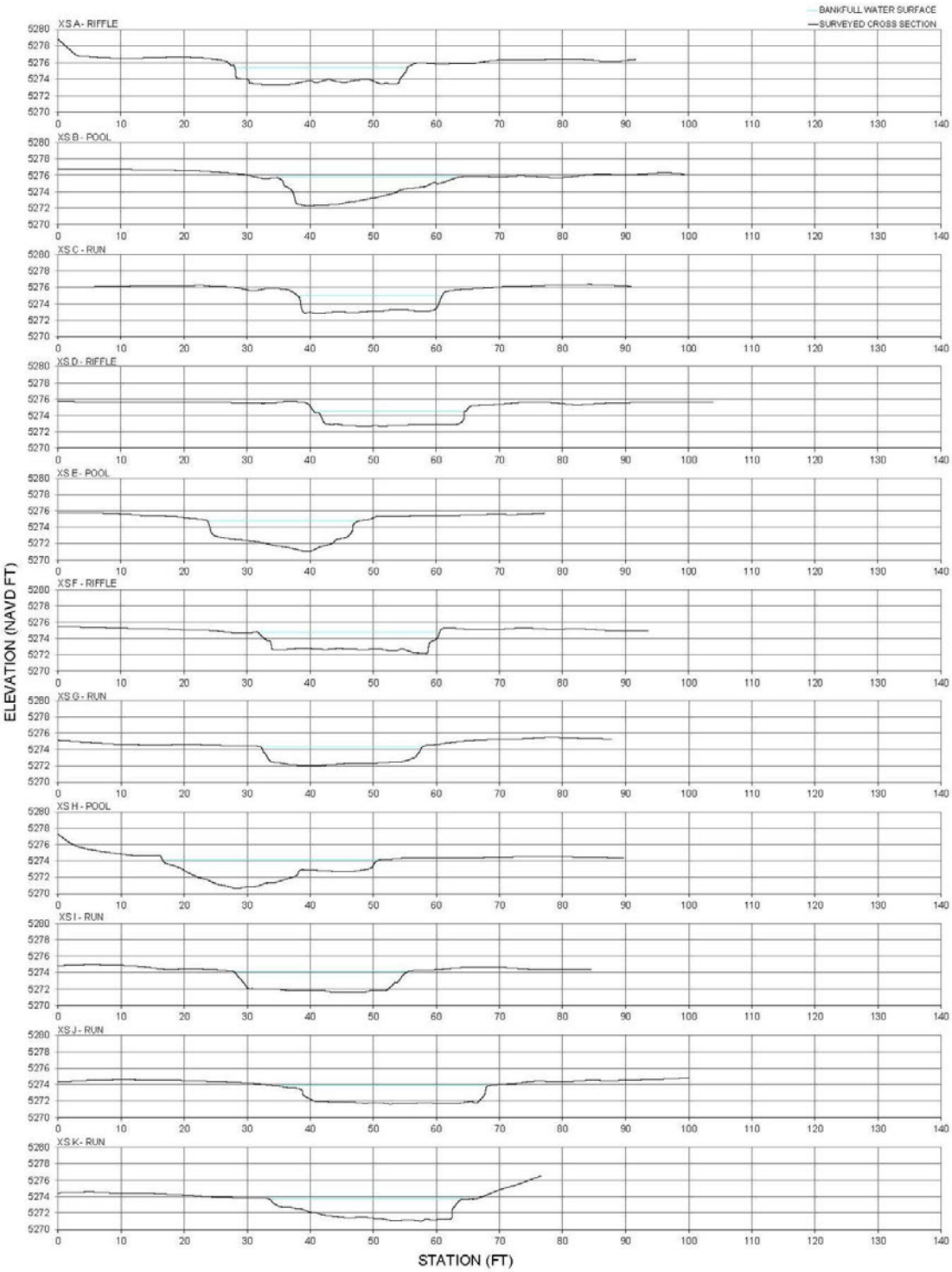

Figure 7-11. Surveyed stream channel cross-sections in reach SS-14D of the Streamside Tailings Operable Unit, 2014.

Table 7-4. Stream channel dimensions in the monitoring reaches of the Streamside Tailings Operable Unit, 2014.

Monitoring Reach	Cross-section	Bankfull width (feet)	Mean depth (feet)	Width to depth ratio	Mean width to depth ratio	Standard Deviation
SS-10A	A	29.7	1.6	18.6	18.8	3.1
	B	30.3	1.4	21.6		
	C	24.0	1.7	14.3		
	D	36.1	1.7	21.7		
	E	28.2	1.9	14.5		
	F	28.8	1.6	17.6		
	G	31.5	1.6	20.1		
	H	23.0	1.4	15.9		
	I	28.0	1.3	21.4		
	J	29.4	1.2	23.7		
	K	27.3	1.5	17.6		
SS-10B	A	29.3	1.8	16.5	16.0	2.8
	B	31.8	1.6	19.3		
	C	23.9	1.5	15.6		
	D	25.1	1.4	17.9		
	E	20.4	2.0	10.3		
	F	30.7	2.0	15.4		
	G	26.3	1.7	15.2		
	H	31.5	1.6	20.3		
	I	22.4	1.7	12.8		
	J	27.9	1.8	15.2		
	K	34.9	2.0	17.7		
SS-13	A	31.9	1.4	22.2	19.3	4.1
	B	40.3	2.0	20.0		
	C	27.6	1.6	17.2		
	D	26.8	1.9	14.2		
	E	34.6	1.5	23.6		
	F	30.0	1.3	22.7		
	G	33.5	1.5	21.8		
	H	25.7	1.9	13.7		
	I	36.4	1.5	24.9		
	J	25.5	1.9	13.7		
	K	32.4	1.7	18.6		
SS-14D	A	27.3	1.5	18.0	16.4	2.9
	B	29.0	2.1	14.0		
	C	23.0	1.7	13.4		
	D	23.8	1.4	17.0		
	E	24.1	2.2	10.8		
	F	29.2	1.8	16.3		
	G	25.4	1.5	16.5		
	H	34.7	1.9	18.2		
	I	28.4	1.7	16.4		
	J	33.6	1.5	22.0		
	K	30.8	1.7	17.7		

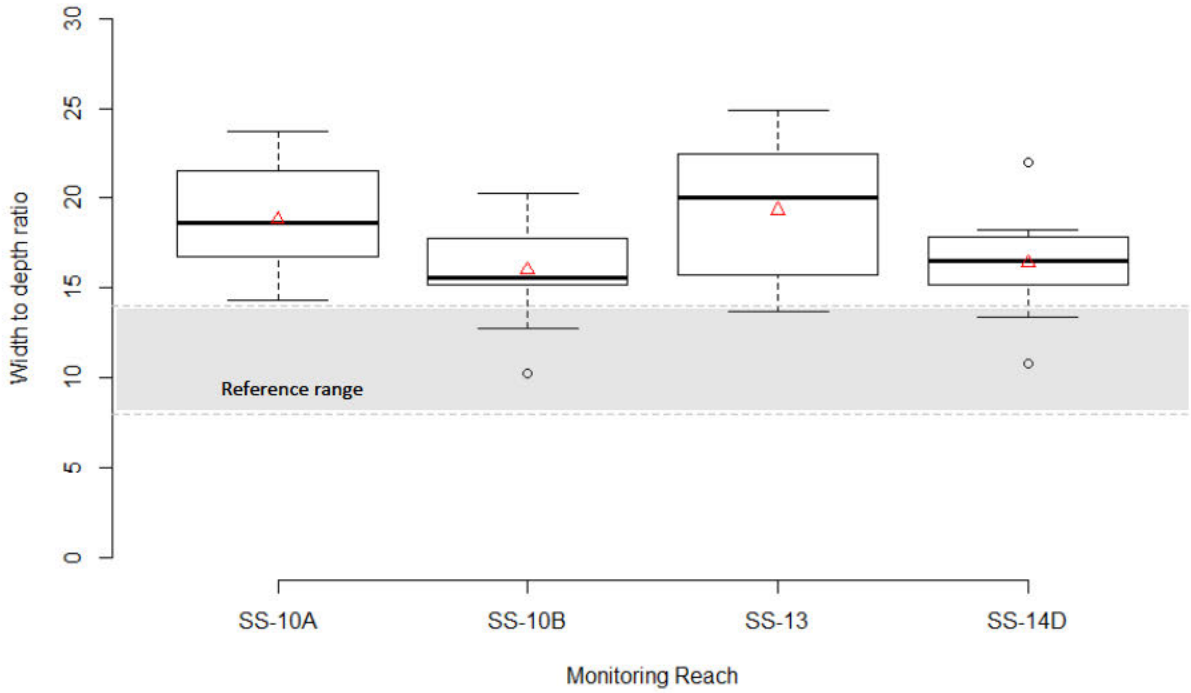

Figure 7-12. Width to depth ratios among cross-sections (n = 11) within four separate monitoring reaches of the Streamside Tailings Operable Unit, 2014.

7.3.3 Undercut Banks

The mean proportion of undercut streambanks within each monitoring reach ranged from 10.8-33.7% [Table 7-5]. With the exception of monitoring reach SS-13, all reaches had mean undercut streambank proportions within the reference value range (8-20%) for the SSTOU [Figure 7-13]. The mean proportion of undercut banks in SS-13 was 33.7% which exceeded the reference range [Table 7-5]. Four survey locations had streambank lengths (i.e., 30 feet) with completely undercut banks resulting in a highly right-skewed distribution in that reach and a large discrepancy between the median and mean estimates [Figure 7-13].

During prior monitoring in 2009, the mean proportion of undercut banks in SS-10A was 26% and 21% in SS-10B [Confluence, 2010b]. In each reach, the proportion of undercut banks was greater than the reference range [Confluence, 2010b].

Table 7-5. Estimated proportion of undercut banks within monitoring reaches of the Streamside Tailings Operable Unit, 2014.

Monitoring Reach	Survey Locations	Surveyed Length (feet)	Undercut Length (feet)	Mean Proportion Undercut (%)	Standard Deviation
SS-10A	22	660	71	10.8	13.9
SS-10B	22	660	85	13.6	26.7
SS-13	22	660	222	33.7	37.0
SS-14D	22	660	102	15.4	21.6

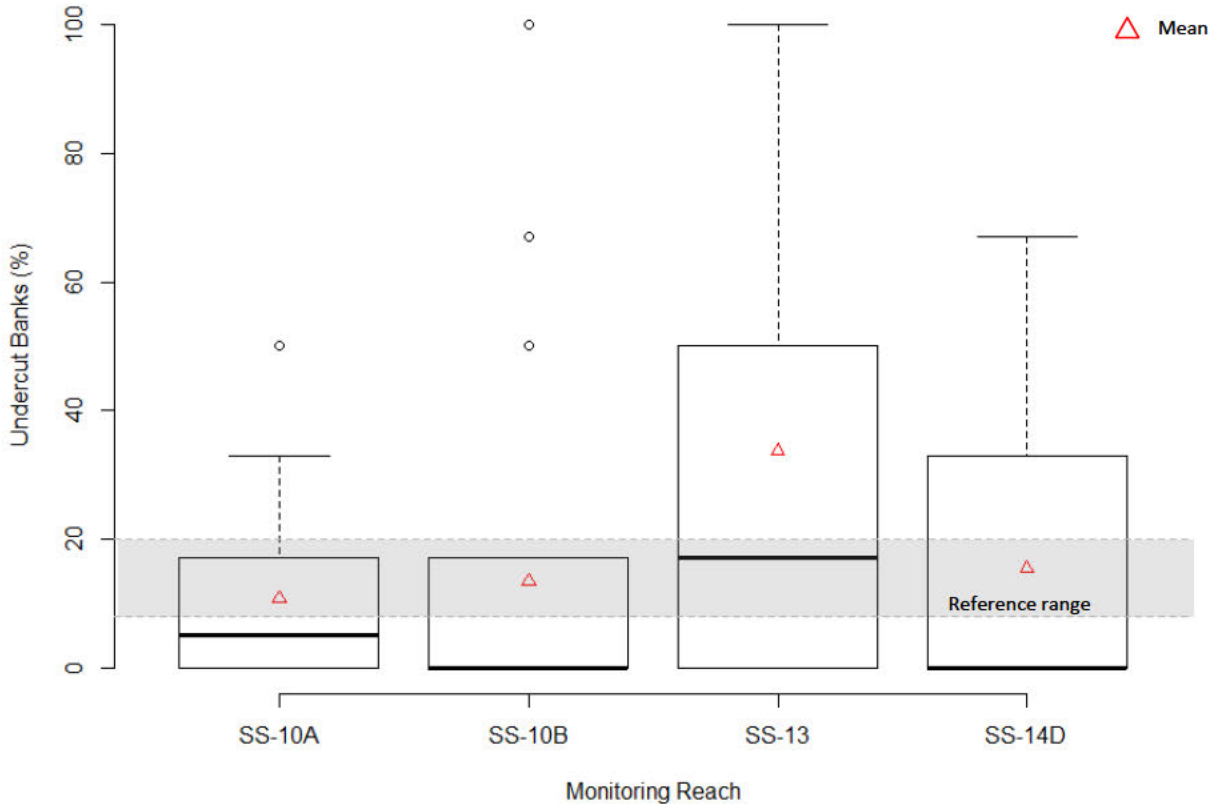

Figure 7-13. Estimates of undercut bank proportions at survey locations (n = 22) within each monitoring reach of the Streamside Tailings Operable Unit, 2014.

7.3.4 Riparian Cover

The mean proportion of overstory riparian cover within each monitoring reach ranged from 0-4.5% [Table 7-6]. All reaches had mean proportions of overstory riparian vegetation which

were below the reference value range (45-65%) for the SSTOU [Figure 7-14]. Mean understory cover ranged from 8.8-29.3% and mean ground cover ranged from 98.2-100% [Table 7-6].

During prior monitoring in 2009, mean overstory riparian cover in SS-10A was 0% and 0% in SS-10B [Confluence, 2010b]. Mean understory riparian cover in SS-10A was 49% in SS-10A and 45% in SS-10B in 2009 [Confluence, 2010b]. Mean ground riparian cover in SS-10A was 79% in both SS-10A and SS-10B in 2009 [Confluence, 2010b].

Table 7-6. Estimated proportion of cover from riparian vegetation within monitoring reaches of the Streamside Tailings Operable Unit, 2014.

Monitoring Reach	Vegetation Cover (%)					
	Ground (<0.5 m)		Understory (0.5-5 m)		Overstory (>5 m)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
SS-10A	97.3	6.9	25.0	21.0	0.0	0.0
SS-10B	99.8	1.1	8.8	8.8	0.7	1.8
SS-13	100.0	0.0	29.3	18.4	0.0	0.0
SS-14D	98.2	8.5	11.6	7.8	4.5	5.1

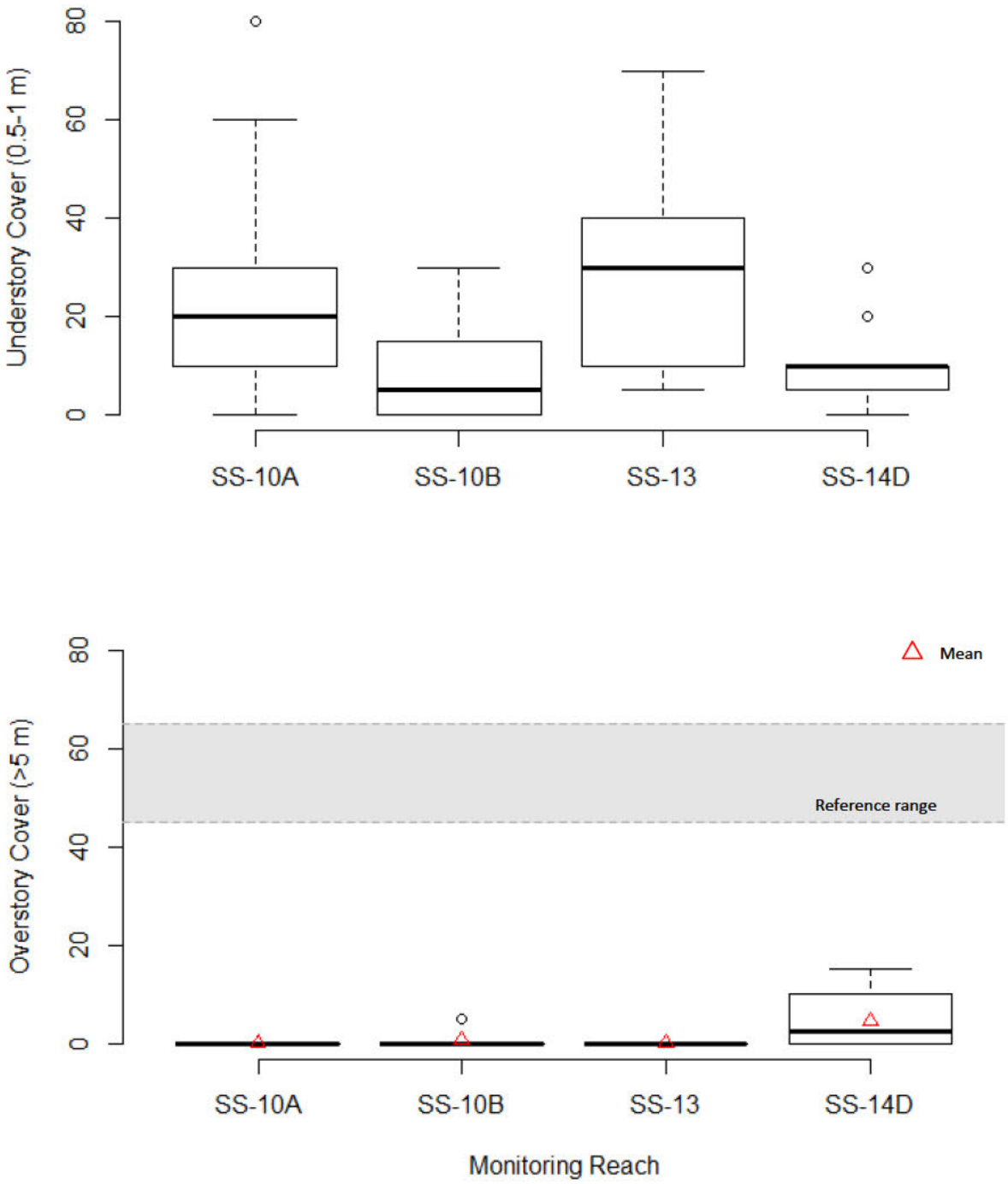

Figure 7-14. Vegetation cover in riparian monitoring plots in four monitoring reaches of the Streamside Tailings Operable Unit, 2014.

7.3.5 Channel Cover

Mean channel shading within each monitoring reach ranged from 13.8-18.3% [Table 7-7]. All reaches had mean channel shading proportions which were within the reference value range (15-35%) for the SSTOU with the exception of SS-13 [Table 7-7]. All mean channel shading estimates were strongly skewed [Figure 7-15] by measurements taken at the streambanks; there was relatively little channel shading in the channel center in all monitoring reaches.

During prior monitoring in 2009, mean channel shading in SS-10A was 8% and 12% in SS-10B [Confluence, 2010b].

Table 7-7. Stream channel shading in monitoring reaches of the Streamside Tailings Operable Unit, 2014.

Reach	Densiometer dots shaded (%)	
	Cross-section total	
	Mean	Standard Deviation
SS-10A	17.8	34.7
SS-10B	17.4	32.6
SS-13	13.8	27.9
SS-14D	18.3	29.8

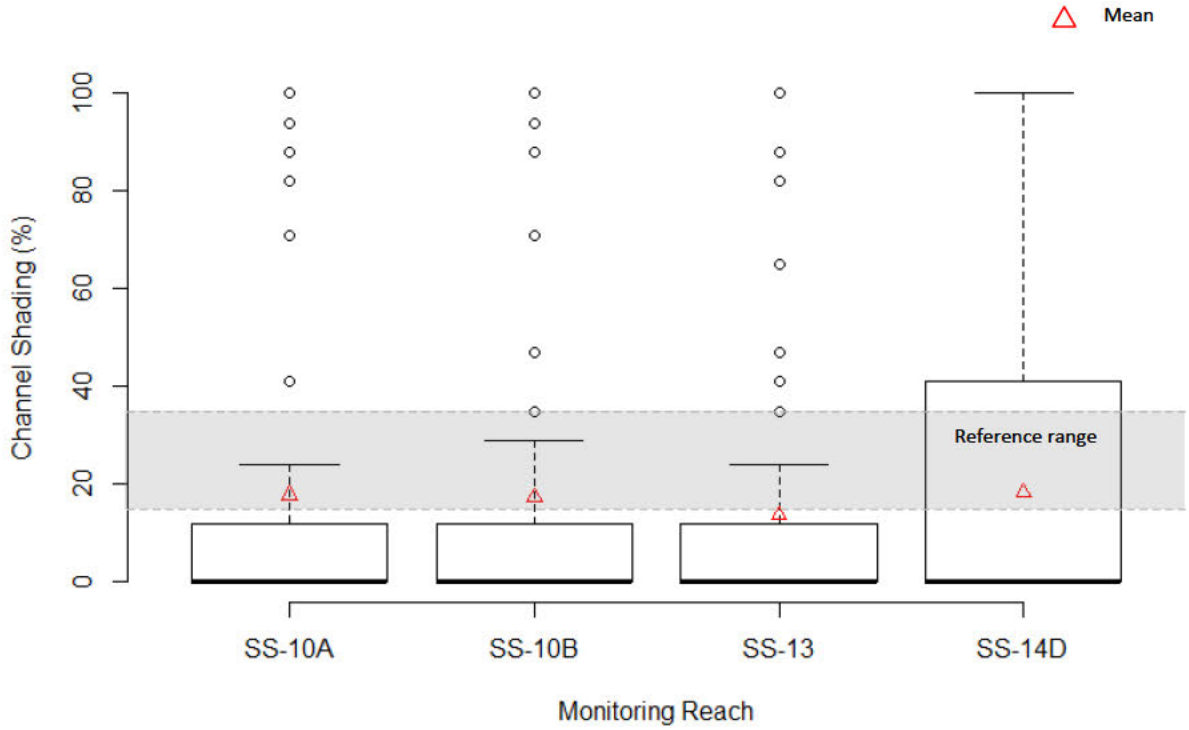

Figure 7-15. Channel shading estimates in four monitoring reaches of the Streamside Tailings Operable Unit, 2014.

7.3.6 Woody Debris

The mean proportion of each monitoring reach with streambank cover from large wood ranged from 0-2% [Table 7-8]. All reaches had mean large wood cover proportions which were below the reference value range (15-35%) for the SSTOU [Table 7-8].

During prior monitoring in 2009, mean channel shading from wood in SS-10A was 5.5% and 3.6% in SS-10B [Confluence, 2010b].

Table 7-8. Cover provided by large woody debris along the streambanks in four monitoring reaches of the Streamside Tailings Operable Unit, 2014.

Monitoring Reach	Survey Locations	Surveyed Length (feet)	Length Covered by Wood (feet)	Mean Proportion Covered by Wood (%)	Standard Deviation (%)
SS-10A	22	660	4	1.2	3.1
SS-10B	22	660	6	1.8	2.7
SS-13	22	660	0	0.0	0.0
SS-14D	22	660	0	0.0	0.0

7.4 DISCUSSION

The results of geomorphic monitoring in the SSTOU in 2014 indicate that the reconstructed channel characteristics fall within the reference value ranges for some, but not all, monitoring metrics after five years post-remediation (reaches SS-13 and SS-14D) and ten years post-remediation (reaches SS-10A and SS-10B). In general, there was little variation between metrics among sites; each particular metric was either within (or near) the reference range in all reaches or was outside the reference range in all reaches. Metrics which were within the reference ranges at most or all reaches included percent pools, undercut banks (above range in reach SS-13), and channel cover (below range in reach SS-13). Metrics which were outside reference ranges included width to depth ratio, riparian cover, and woody debris which were outside the reference ranges in all reaches.

The channel width to depth ratio was higher than the reference range in all reaches in 2014. At SS-10A and SS-10B, the width to depth ratios in 2014 (10 years post-remediation) were greater than in 2009 (5 years post-remediation). Since the channel banks remain relatively stable post remediation, an increase in the width to depth ratio suggests the channel bed is aggrading as sediment transported from upstream is deposited within the reach. Aggradation may be occurring due to insufficient sediment transport capacity within the assessed reaches. Extensive algae growth, related to extreme levels of nutrient enrichment from the Butte wastewater treatment plant, may be one factor that could lead to reduced sediment transport capacity by decreasing overall water velocities and increasing channel roughness leading to capture of suspended sediments. Sediment deposition behind algal growth was noted during the field visit. In addition, sediment transported into the assessed reaches during years with larger and prolonged runoffs, such as occurred in 2011, is likely retained within the reaches during years with relatively moderate runoffs, including 2012 through 2014.

The maximum observed riparian overstory cover (4.5%) was only 10% of the lower limit of the reference range (45%) which reflects either the general scarcity of large tree plantings in the riparian area of the SSTOU or poor survival of those trees. Anecdotal evidence suggests that beaver activity has negatively affected tree survival in the SSTOU despite installed fencing. Due to the scarcity of large trees, cover provided by those large tree plantings was not sufficient to reach the reference range in any of these reaches. Planted trees provided the only overstory cover. It appeared that survival of those planted large trees was relatively high, although no quantitative estimate of survival was made. Over the longer term, larger trees may (or may not) become more common on the floodplain through natural recruitment. However, after five and ten years of monitoring at these reaches there has apparently not been sufficient time for natural recruitment and growth of large trees to the extent that any could yet provide canopy cover. Some willows and shrubs have grown vigorously and now approach 5 m in height, but all willows and shrubs were classified as understory cover rather than as overstory cover. Additionally, it is unclear if large trees were common on the Silver Bow Creek floodplain prior to settlement and inundation with mine tailings and the abundance of large trees in the Silver Bow Creek floodplain prior to settlement and contamination is unknown.

In contrast to overstory riparian cover, ground cover was nearly 100% in all reaches and understory cover was considerably higher than overstory cover. Where ground cover was absent

it appeared that remnant metal contamination occurred in localized “hot spots”. Understory cover was dominated by willows which provided a high level of stream shading along the streambanks as reflected in the channel cover metrics. Willow growth was highest at the stream margins and appeared to decrease with lateral distance from the streambanks.

The reference range for woody debris cover may also present an unrealistic target for the SSTOU. Available large wood in or near the stream channel consists of large planted trees and large wood structures placed in the streambanks during reconstruction. The planted trees are generally still alive and young and therefore it seems unreasonable to expect recruitment of substantial amounts (i.e., enough to provide >15% streambank cover) of large wood from dying trees in the floodplain. Additionally, there does not appear to have been enough large wood structures placed in the streambanks to provide >15% cover and those large wood pieces that were placed in the streambanks have begun to wash downstream during seasonal flooding. Therefore, it is highly unlikely that these reaches will have cover from large wood in the reference range in the near future due to the scarcity and gradual loss of large wood streambank structures and the overall scarcity of trees in the riparian area at this time.

Whereas large wood appears to be scarce in the stream channel there has been recruitment of small wood in the stream through beaver activity. Beavers appear to be actively recolonizing Silver Bow Creek, particularly in Subarea 1 where willow growth is greatest. As streamside willows become denser in downstream reaches, it appears likely that beavers will continue to recolonize the stream and consolidate small wood within the channel. That activity along with damming of the stream channel would provide additional cover for fish and other wildlife and increase habitat complexity.

8.0 VEGETATION[32]

8.1 INTRODUCTION

In 2014, Bighorn Environmental Sciences (Dillon, Montana) monitored the following aspects of remediation and restoration in the Streamside Tailings Operable Unit (SSTOU): revegetation monitoring which evaluates different reaches each year in rotation [Section 8], soil sampling in the uppermost reaches to investigate whether liming without removal can play an important role in repair work [Section 9], late winter and early spring bird use which evaluates different subareas each year in rotation [Section 10], and small mammal monitoring [Section 11].

Revegetation in each reach or phase of the SSTOU is monitored in temporal rotation until it meets desired conditions, usually after a 10-year performance period. This report contains the results of 2014 revegetation monitoring in Subarea 1 (Reaches B and C), Subarea 2 (Reach J), Subarea 3 (Reach K), and Subarea 4 (portions of Reach R seeded in fall 2011 and Reach S).

Appendix I contains photographs of revegetation monitoring in Subareas 1 and 2; Appendix J presents photographs of monitoring Subareas 3 and 4. Readers who have difficulty visualizing vegetation from canopy-coverage or shrub-density data might want to review those two appendices now.

Appendix K contains the critical species-composition summaries based on canopy coverage. Appendix L contains soil-sampling photographs. Appendix M portrays other aspects of revegetation.

Montana Department of Environmental Quality (MDEQ) now handles mapping internally. The entirety of the SSTOU has been assigned to consecutively numbered maps from the southwest edge of Butte (Map 1) to the I-90 crossing (Map 35). Transects in Reaches B and C are on Map 2 through Map 5. Both Reach J and Reach K transects are on Map 12 and Map 13. Reach R is on Map 27 through Map 30, and Reach S on Map 30 through Map 32.

8.1.1 Precipitation Effects

In semiarid regions such as the SSTOU, seasonal and annual precipitation play such important roles in revegetation that this report begins with a precipitation summary. Some precipitation effects are direct, while others are indirect (e.g., they manifest as changes in groundwater elevation). Precipitation in May and June usually has the greatest direct effect on seed germination, plant establishment, and growth of cool-season plants, but antecedent soil moisture and the timing, intensity, and duration of rainfall all influence plant performance.

Average annual precipitation for the past 50 years at the Butte Airport was 12.5 inches [Table 8-1]. The most recent five years, cumulatively, are right at the mean for total annual precipitation, but the springs were wetter.

[32] Chapter 8 was prepared by Rich Prodgers of Bighorn Environmental Sciences (Dillon, Montana) with minor editing and formatting by RESPEC.

Last year, I made the case that, since revegetation sampling in 2013 occurred before the wet September, revegetation data reflected as dry a period as any since remediation of Silver Bow Creek began. 2014 was much better, although spring precipitation was the same as in 2013 [Table 8-1]. While July was dry, both June and August experienced more than three inches of precipitation, the latter benefitting perennials far more than waning annuals.

Observed conditions are to be compared to desired conditions in years of "near-normal" precipitation. 2014 precipitation was 20% above normal. Three inches fell in August, some before sampling and some after. One could make the case that above average precipitation promoted meeting desired conditions unduly. At the same time, repairs are planned for impaired soils in Reaches B and C. As a compromise, I suggest comparing to desired conditions without the benefit of confidence interval, and monitoring these reaches again in 2017 following repairs.

Table 8-1. Precipitation at Butte, Montana.

Year	Precipitation (inches)	
	Annual	May and June
1964-2014 (mean)	12.5	4.4
1999-2009 (mean)	11.4	4.0
2010	15.4	6.8
2011	11.7	6.4
2012	9.1	3.8
2013	11.4	4.2
2014	14.9	4.2
2010-2014 (mean)	12.5	5.1

8.2 METHODS

8.2.1 Revegetation

Revegetation sampling in established revegetation, which combines canopy coverage [Daubenmire, 1959] from plots along transects and shrub density from 1-m wide belts along the same transects, remains unchanged from previous years.

Revegetation was sampled along 100-meter transects. Canopy coverage was estimated in 20 0.5-m^2 plots at 5-m intervals along each transect. Plant cover was estimated as accurately as possible; cover classes were not used. Shrubs were counted if rooted in a 100-m belt transect. (Sometimes shrubs were too dense to quantify accurately, especially narrowleaf willow, which spreads from rootstocks.) Transects in Reach S were sampled for the first time; the others were previously sampled.

The long length of these transects reflects average site and vegetation conditions within a significant portion of a hydrologic zone better than shorter transects that have a greater chance of emphasizing aberrant spots. I attempted to place transects within a single hydrologic zone as

mapped, but it turned out that hydrology in some cases changed since the mapping that initially guided revegetation, so some transects traverse more than one hydrologic zone.

To avoid littering the floodplain and banks with permanent markers (e.g., steel fenceposts that could also prove dangerous to equipment and recreational users), transects are located by GPS coordinates only. Thus, the identical plot locations are not assured, just the same approximate areas. An unpaired *t*-test is appropriate for comparisons through time, not the more powerful paired *t*-test. Small differences should not assume undue importance.

Reaches B and C are old enough to evaluate revegetation success using 2014 data. Desired conditions are listed in Table 8-2.

Table 8-2. Minimum desired stratified canopy coverage[33] approximately 10 years after seeding in years of near-normal seasonal precipitation.

Hydrologic Zone	Average Perennial Canopy Coverage
Uplands, Subirrigated	60%
Streambanks, Transition Zone	80%
Wetlands (not open water)	100%

Streambanks proper, the strip encapsulated with coir fabric, were not monitored due primarily to difficulty placing linear transects on curved banks and because dense, sometimes impenetrable shrubs interfere with placing transects. In Subareas 1 and 2, streambanks were among the easiest and most successful revegetation. Transect 33 was buried under Town Pump fill dirt and can no longer be monitored.

8.2.2 Soils

Sample locations were subjectively located based on varying degrees of apparent impairment. Visual clues ranged from soil color to the amount of plant cover and species composition. Particular effort was made to sample where perennials were declining, or where metal-tolerant species had replaced those seeded.

Each sample submitted to the lab was a composite of three samples taken within 10 m of the initial hole and often half that distance. I always sampled to a depth of 6 inches. If deeper contamination was suspected (e.g., tap-rooted plants were dying), I sampled the second 6 inches as well.

8.2.3 Laboratory and Data Analyses

Most data summaries are simple descriptive statistics, usually the mean. If used, confidence intervals are two-tailed with 0.1 Type I error, or one-tailed if used to compare to the desired conditions in Table 8-2. However, confidence intervals were not used this year to compare to desired conditions for the reasons previously described.

[33] Excluding annuals and noxious weeds.

The MSE Soil lab (Butte, Montana) analyzed for electrical conductivity and pH from paste extract and total metals and arsenic from strong acid digestion and inductively coupled plasma (ICP) analysis. The Agvise lab (Northwood, North Dakota), analyzed for mineral nitrogen, Olsen phosphorus, ammonium acetate potassium, texture from hydrometer, and Sikora lime rate. The Sikora method is equivalent ($r^2 = 0.97$) to the Shoemaker, McLean, and Platt (SMP) buffer pH without generating toxic waste.

8.3 RESULTS AND DISCUSSION

Species composition for each transect is in Appendix K. Photographs of sample transects are in Appendix I. Field notes are available in Appendix N.

8.3.1 Reaches B and C

8.3.1.1 Revegetation History

Except for a cover crop in Reach B and the streambanks, which were seeded as constructed, Reaches B and C were first seeded simultaneously in fall 2002. Streambank transplanting occurred at the first appropriate season after construction was complete. The floodplain was transplanted in fall 2002 immediately following seeding. A landowner (Town Pump) buried some revegetation with dirt fill from a nearby excavation. Streambank lengths in Reach B were 6,050 feet (total) and in Reach C were 5,150 feet (total).

2001.-In 2001, the initial streambank seeding and transplants occurred in Reaches B and C. The streambank seeding by the general (construction) contractor was generally ineffective. Streambanks are the easiest habitats to revegetate in the floodplain due to moistness and the fabric, which promotes germination and shades tiny seedlings. Nutrient-loaded stream water meets the plants nutritional needs, more so in the upper reaches.

On streambanks, the coir fabric was modified to include an inner layer of gauze-like material that was supposed to prevent dirt from washing through the coarse-weave fabric. Unfortunately, it prevented effective interseeding, which had proven so important in Reach A. Before long, meadow foxtail seed from Lower Area One (LAO) washed down and transformed the banks to swards of that invasive grass, gauze or no.

In fall 2001, about 4,000 willow seedlings and 4,000 wetland plugs were installed in about 4,100 feet of upper Reach B streambanks under remedy. The spacing remained one of each per linear foot along outside curves and one of each per three feet along straight stretches and inside curves. The willows were 70% narrowleaf and 15% each Geyer and Booth. Sixty percent of the water's edge plugs were *S. microcarpus*, 30% were Nebraska sedge, and 10% were water sedge. Later, 1,150 narrowleaf willows and 400 Booth willow were planted in lower Reach B. Also, an additional 1,175 each Northwest Territory and water sedges, and 2,500 Baltic rush were planted along the water's edge.

We first used "brush blankets" to protect willows from undue herbaceous competition among Reach B transplants. Brush blankets are fabric that are alleged to allow water to penetrate but

prevent herbaceous seedling emergence, thus preventing direct competition. The transplant is situated in a slit in the center of the fabric. We discontinued their use for several reasons:

- If herbaceous plants established early, they came up the same hole in which the willow was located, intensifying competition.
- They doubled the cost per installed willow.
- Later, some herbs did grow through the brush blankets. Competition effects were unknown, but some plants were torn from the streambank during removal, which was very difficult for that reason
- A spring 2003 streambank flood pulled many loose, and they ended up folded over the willow, causing death if the blanket was not removed in time.

The Natural Resource Damage Program paid for an additional row of both willows and wetland herbs at the rear of the coir fabric at the same spacing: 400 water birch, 800 each Geyer and Booth willow, and 2,000 narrowleaf willow. Additional transplants were installed later. The general practice is to place sedges and small-fruit bulrush at the water's edge and Baltic rush and a few forbs at the rear of the fabric. By spring 2003, at least 1,000 willows were absent from the water's edge. (At the time, muskrats were not implicated, although this proved to be the case.) Most wetland plugs did well, and some (e.g., small-fruit bulrush and to a lesser extent Nebraska sedge) spread quickly, although most of the streambanks remained barren.

Streambank planting didn't quite reach the Frontage Road bridge near Rocker. About 70% of the willows were slenderleaf willow with about 15% each of Geyer and Booth willow. About 60% of the wetland herbs at the water's edge were small-fruit bulrush, 30% Nebraska sedge, and 10% water sedge. At the rear of the coir fabric, Baltic rush was the main herb planted.

2002.-Due to blowing dirt and the fact that construction was proceeding piecemeal, the Reach B floodplain (but not uplands outside the floodplain) was temporarily seeded in spring 2002. In addition to providing erosion control, a preparatory crop also withdraws soil moisture before it wicks to the surface, lessening the accumulation of salts at the soil surface. Although Reach B initially had its share of unsatisfactory revegetation, coversoils in 2003 were less saline near the surface than in Reach C.

Moist areas were seeded with barley and red clover. This worked fine. Drier areas were seeded with barley and sweetclover. This was my mistake. I thought the sweetclover, a biennial, would be killed by compost incorporation and seedbed preparation before permanent seeding. Instead, sweetclover erupted the following year, forming a dense sward more than 1 m tall in some areas. Aside from an annual grass, we should use only perennial legumes in temporary seedlings, such as barley and alfalfa in drier areas.

Streambanks in Reach C and lower Reach B were transplanted in September 2002 before seeding and transplanting of the floodplain. The spacing remained one of each per linear foot along outside curves and one of each per three feet along straight stretches and inside curves.

The Montana Department of Environmental Quality paid for the planting of 725 each *Salix boothii* and *Salix geyeriana,* 3,400 *Salix* e*xigua* for a total of 4,850 with brush blankets. The Natural Resource Damage Program paid for planting behind the coir fabric; 400 *Betula*

occidentalis, 900 each *Salix boothii* and *S. geyeriana*, and 2,000 *Salix exigua* for a total of 4,200 (still with brush blankets).

Glacier Gold (Olney, Montana) provided compost. Arrowhead Reclamation applied it using a manure spreader. It was incorporated with a disc. The target application rate was 1.5% organic matter addition to the upper four inches of coversoil. This was almost the same rate per acre of compost applied in Reach A, but applied to a thinner depth increment of soil. The reason for shallower incorporation was that seed germination would be enhanced by the improved physical characteristics near the surface, and microbial benefits would be greater if compost was kept in the oxygenated zone.

The floodplain was seeded in October and early-November 2002, starting with the wettest zones, so they would be ready for transplanting while the seeders worked in uplands.

The Reach B and Reach C floodplain was transplanted in fall 2002 immediately following seeding. The main difference from Reach A was that willows were spread over large areas at lesser density. The idea was to avoid losing entire pods to local conditions such as remaining contamination. The entire transition zone and most wetlands (26 acres) were planted using 8 x 8 foot spacing. By fall 2003, fewer than half of these could be found, and roughly the same percentage of trees had perished.

Post-2002.-Subsequent revegetation was limited to repair work. This concludes the revegetation chronology for Reaches B and C.

8.3.1.2 Canopy Coverage

Vegetation was sampled in Reaches B and C in 2014 along the same transects sampled in 2007 [Prodgers, 2008] and 2010 [Prodgers, 2010b]. Perennial cover in all three years is summarized in Table 8-3. Perennial cover increased by 12% from 2007 to 2010 (actual cover) and decreased 9% from 2010 to 2014 (actual cover), both wet years with annual precipitation (i.e., about 20% above the long-term average). The decline, I believe, is from manifesting soil limitations (see Section 8). Plant cover did not decline where soils appeared unimpaired.

Of 15 transects sampled in 2010 and 2014, two increased, four were about the same, and nine decreased. Example of stability or increase are Transect 19b (94% perennial cover in 2010 and 104% in 2014) and Transect 35 (126% perennial cover in 2010 and 128% in 2014). Both are transition-zone sites.

But upland Transect 22 declined from 48% to 36% in the same four years, and at Transect 26, perennial cover declined from 71% to 57%. Both are now below the desired conditions.

Mean perennial cover for the upland and subirrigated sites was 67%, which surpasses the desired condition of 60%. For the transition zone, mean perennial cover was 95%, which again exceeds the desired condition of 80% canopy coverage. This is a testament to how good most revegetation was and is. At the same time, the overall trend from 2010 to 2014 is down. Fifty-six % of cover transects were down, 31% about the same, and 13% up.

Table 8-3. Acreages by hydrologic zone, which are for the most part seeding type.

Hydrology Type	Area (acres)

	Reach B	Reach C
Stream	1.5	3.0
Saturated Wetlands	2.8	0.7
Transition Zone	12.3	11.5
Subirrigated Zone	11.5	13.1
Upland Zone[34]	41.0	36.6
Total	**69.1**	**64.9**

8.3.1.3 Shrub and Tree Density

Shrub densities in 2013 are summarized in Table 8-4 as well as being more fully quantified above. Some transects have more shrubs now than in 2010, some less.

[34] includes BA 10 in Reach C and sediment basins in Reach B.

Table 8-4. Comparative perennial[35] canopy coverage for sample transects in Reaches B and C, 2007, 2010, 2014.

Transect	Hydrologic Zone	Perennial Cover (%)			Comments
		2007	2010	2014	
19B	Transition	85	94	104	Meadow foxtail, areas of poor soil.
20	Transition/Subirrigated	90	94	95	Diverse, repair area at 10 m.
21	Subirrigated	69	88	78	Diverse, areas of poor soil.
22	Upland	31	48	36	Mostly repaired upland, infertile.
23	Subirrigated	61	74	na	Somehow missed it or lost data.
24	Subirrigated	82	93	66	Basin wildrye, some contamination from W end.
25	Subirrigated	81	108	87	Pipeline dist., thick surface litter.
26	Upland	67	71	57	Some contamination from pipeline.
27	Upland	68	84	86	Thick wildrye; still see compost.
28	Transition	98	103	94	Creeping meadow foxtail, yikes!
29	Transition	96	na	56	
30	Subirrigated	67	83	65	Contaminated spots.
31	Subirrigated	68	78	61	2X compost improved by fertilization
32	Subirrigated	50	78	89	Bird's-foot trefoil and basin wildrye
33	Upland	52	47	na	Buried by Town Pump fill.
34	Subirrigated/Transition	74	82	62	Less grass, more weeds.
35	Transition	86	126	128	Lots trefoil & 2 grasses
36	Upland Rock Repository	49	57	52	Dry site, rabbitbrush, interspersed with. wheatgrass.
37	Transition	96	93	94	Creeping foxtail, redtop, trefoil
53	Upland BA 10	71	74	na	Sampled 2009 and 2010, and not 2014

[35] Excluding annuals and noxious weeds.

Table 8-5. Woody plant density summary for sample transects in Reaches B and C, 2014.

Transect	Hydrologic Zone	Density (number/ha)	Main Species
19B	Transition	1,000s	Willows & buffaloberry
20	Transition/Subirrigated	1300	Willows
21	Subirrigated	1500	Mostly rabbitbrush
22	Upland	5700	Sagebrush and rabbitbrush
23	Subirrigated		
24	Subirrigated	1300	Rabbitbrush & golden currant
25	Subirrigated	20000	Willows
26	Upland	4400	Sagebrush and rabbitbrush
27	Upland	2700	Sagebrush and rabbitbrush
28	Transition	2300	Willows
29	Transition	800	Willows & others
30	Subirrigated	2200	Sagebrush and rabbitbrush
31	Subirrigated	8500	Sagebrush and rabbitbrush
32	Subirrigated	400	Rose
33	Upland		
34	Subirrigated/Transition	900	Willows, aspen, & others
35	Transition	1100	Willows, buffaloberry
36	Upland Rock Repository	7300	Sagebrush and rabbitbrush
37	Transition	800	Willows, currant, buff-berry
53	Upland BA 10		

8.3.1.4 Trends

Reaches B and C collectively have exceeded the desired conditions. At the same time, 2014 was a wet year, and repairs are scheduled for these reaches. What are the trends? Comparison is made to Prodgers [2007] and Prodgers [2010a]. Recall that most revegetation was initiated in 2002.

Perennial plant cover in sample years must be viewed in the context of precipitation [Table 8-1; Figure 8-1], as much revegetation has upland or subirrigated hydrology, which are similar sites for fibrous-rooted plants. Of the three sample years, 2014 experienced the least spring precipitation. 2010 was one of the flood years on Silver Bow Creek.

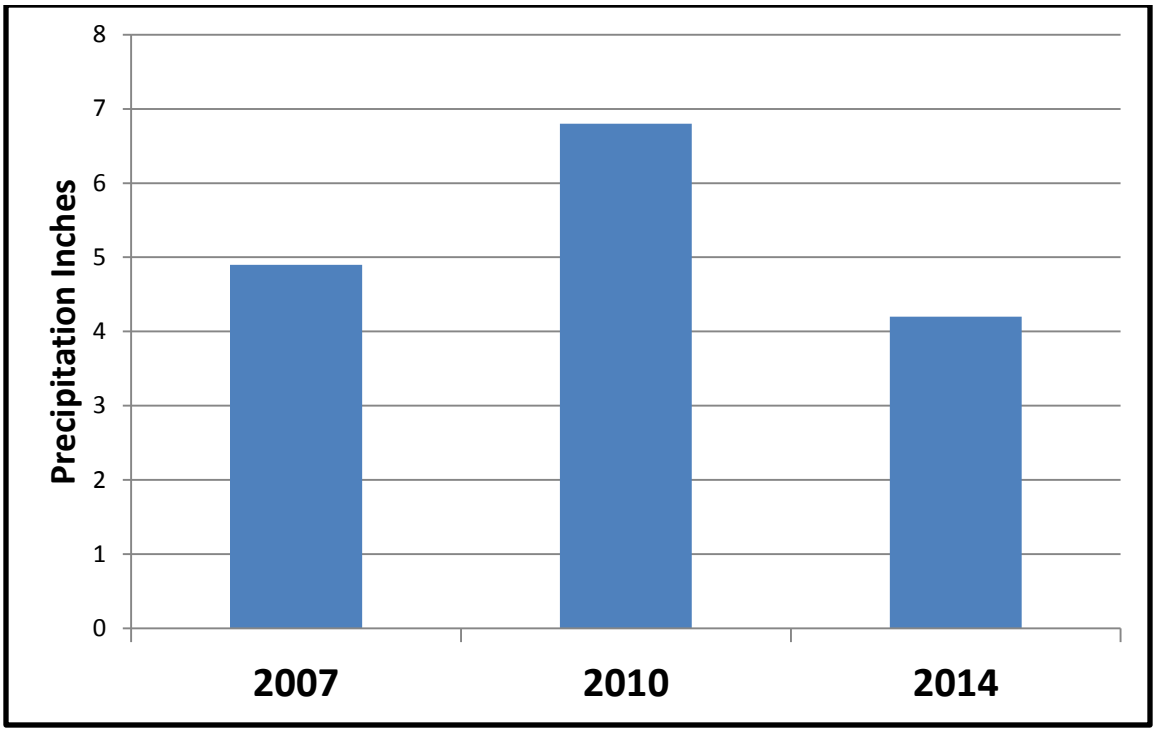

Figure 8-1. May-June precipitation, Butte.

Figure 8-2 shows mean perennial plant cover and legume cover. Legumes in general are one of the first groups of plants to suffer from soil limitations of all types from salinity to acidity and heavy metals. Contamination has had little impact on collective plant cover or legumes, which shows that the contaminated acreage is limited.

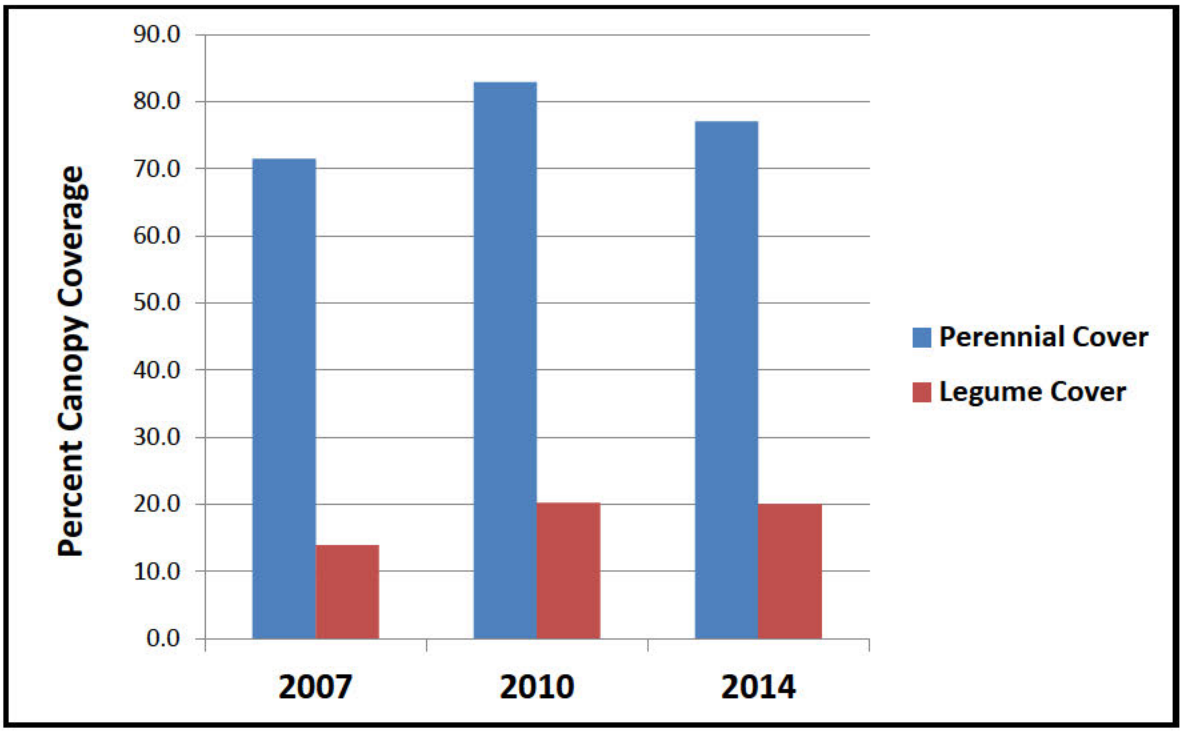

Figure 8-2. Mean perennial cover and legume cover.

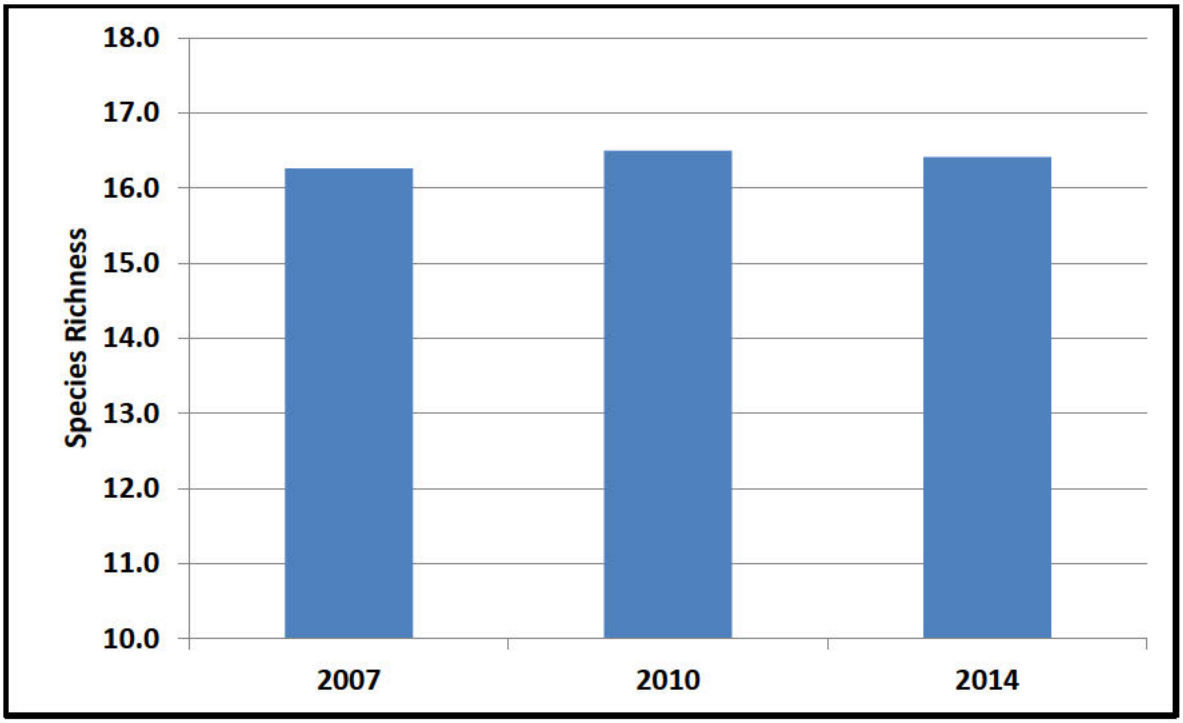

Figure 8-3. Number of species sampled.

Diversity is popular even if the functional implications are unclear. Richness is simply the number of species per area (or log of area to correct for inventory areas of different sizes). Figure 8-3 indicates little change over time even if species composition has changed.

A complementary way of evaluating diversity incorporates relative abundance. Plant communities with a number of co-dominant, or at least important, species are more diverse than those one or two dominants and some "also-rans". This has been termed "equitability." Using Claude Shannon's famous equation and natural logs, Figure 8-4 shows the same trend as richness, which is little change over time. Note that the range in equitability is just 1.93 to 1.97.

Turning our attention to species, the one in which I am most interested is our most invasive plant that has not been designated a noxious weed: Garrison creeping meadow foxtail (*Alopecurus arundinaceus*). It was seeded in Lower Area One. This grass was never seeded in the SSTOU, but it has displaced many natives in the transition zone and wetter portions of the subirrigated zone. It is now the main species on streambanks, and the wonderful diversity once prevalent there now can be seen only in monitoring reports. This rhizomatous grass (spreads through below ground stems, or rhizomes) is also a copious seed producer. It spreads two ways, either by invading new sites that meet its habitat requirements (moist to wet), or by increasing where present. Both account for its growing prevalence as portrayed in Figure 8-5, whereas Figure 8-6 provides a photographic example. Remember, it was not deliberately seeded in the SSTOU.

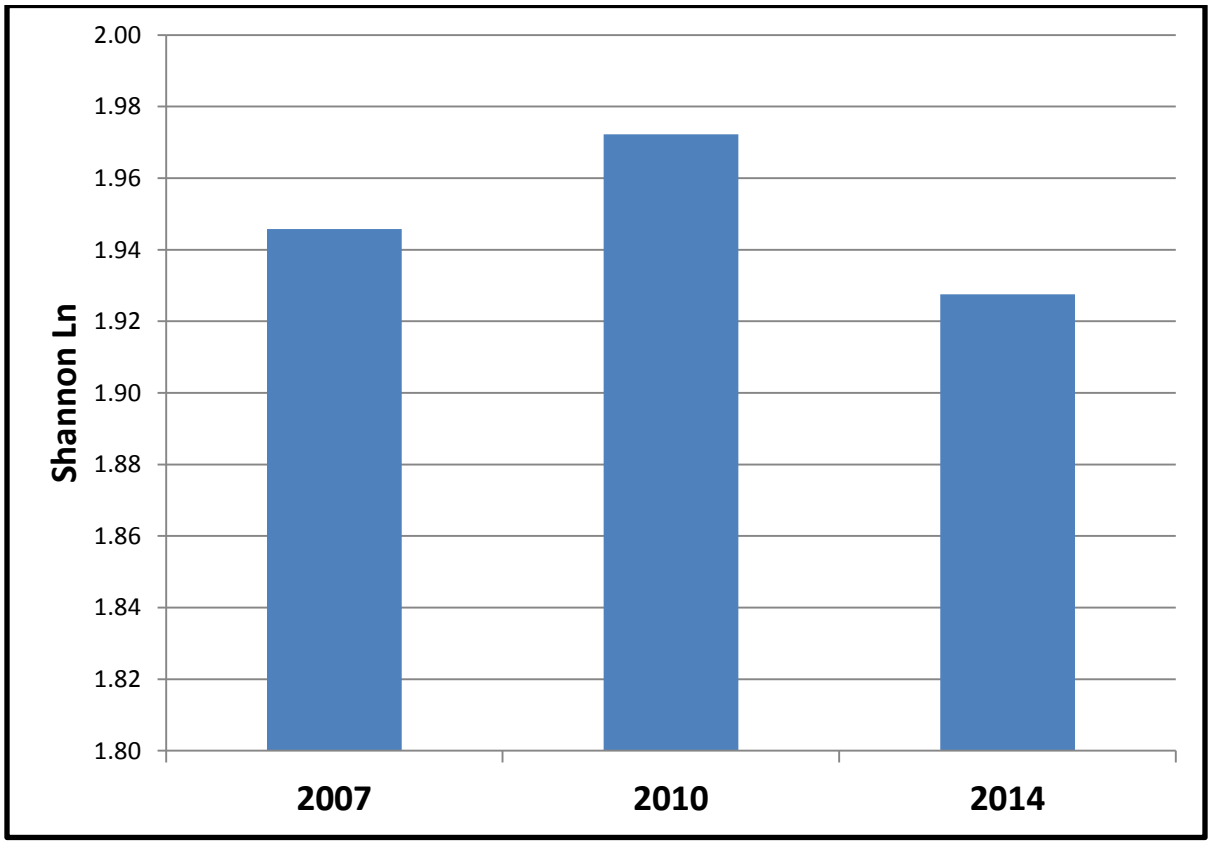

Figure 8-4. Species equitability.

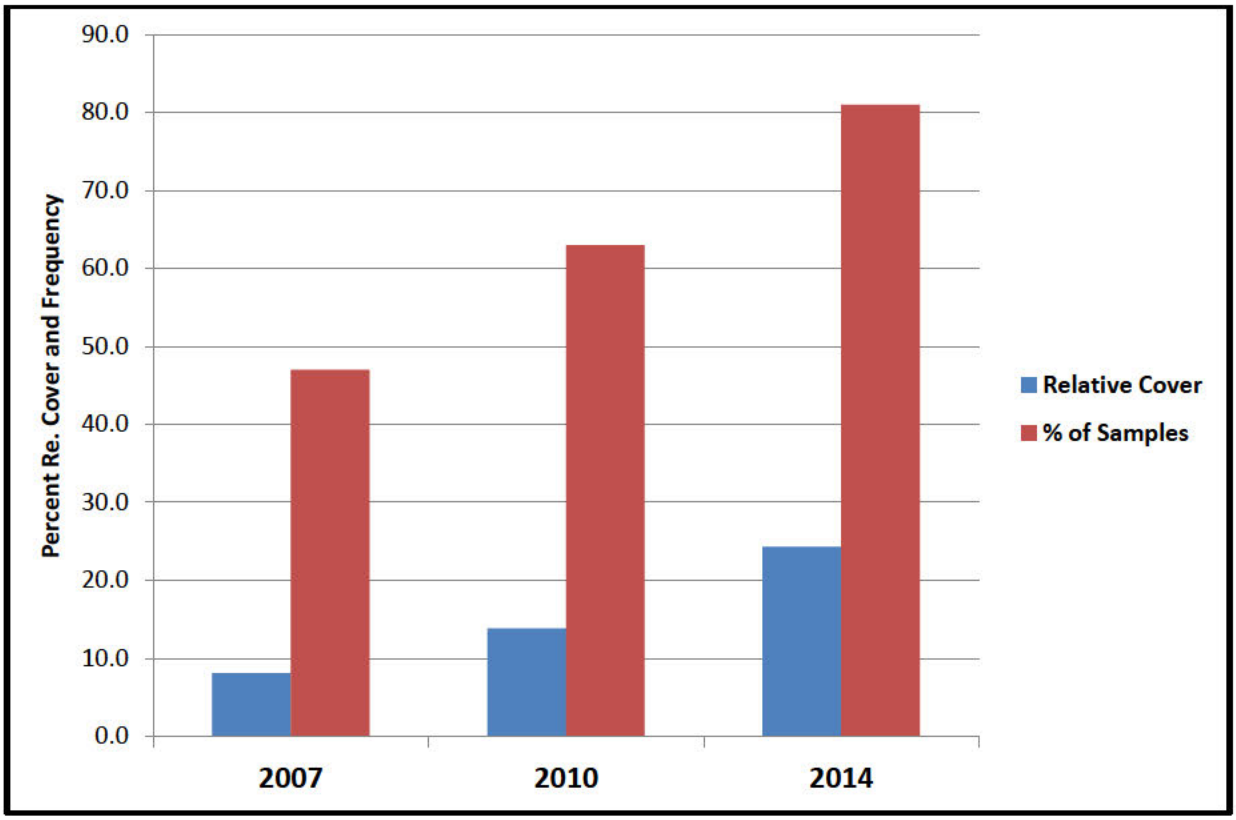

Figure 8-5. Garrison creeping foxtail abundance.

Figure 8-6. Moist portions of Reach B now are mainly dominated by unseeded creeping meadow foxtail.

A final consideration is the amount of exposed bare dirt, the fine-earth fraction (rock fragments >2 mm are estimated separately). The reduction in the early years in Figure 8-7 is to be expected. The equivalent increase from 2010 to 2014, in my opinion, indicated manifesting contamination better than did perennial plant cover [Figure 8-2]. Ground cover plays an important role in limiting soil erosion.

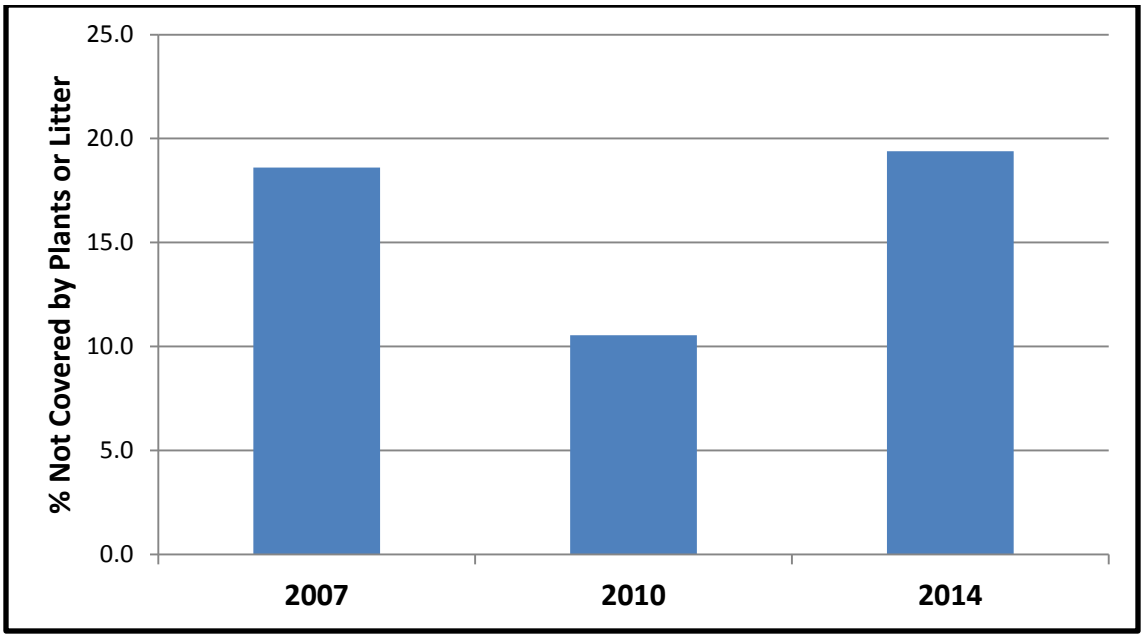

Figure 8-7. Bare dirt (<2 mm).

8.3.2 Reach J

8.3.2.1 Revegetation History

This is the second revegetation monitoring of Reach J. Reach J extends from the Rarus Railroad trestle (400 m upstream of Miles Crossing) to the box culvert under the Rarus line (800 m downstream from Miles Crossing). Reach J also extends north of the Rarus line to the Hazlet property (500 m west of the box culvert) where year-long horse grazing is the land use. This year, hay was harvested from the remediated pasture, which in its way is a testament to revegetation success. Vegetation sampling was impractical there due to foliage removal, but Transect 90 (seeded the same) was sampled just east of the Hazlet boundary fence.

The following discussion makes reference to the Universal Transverse Mercator (UTM) coordinate grid on the revegetation Maps 12 and 13. The portion of Reach J from the boundary of Reach I down to Miles Crossing (and also east of 366150, west of 365575, north of 5096950 to 5096975) was seeded in fall 2008 along with the lower part of Reach I (west of approximately UTM line 367550). In other words, the unseeded portion of Reach J following the fall seeding was a strip on both sides of the new channel, then under construction, from 365575 to 366150. Bighorn Environmental Sciences hand-seeded areas too wet for seeding equipment. The area hand-seeded was usually right behind the coir fabric, but also from the pond near Miles Crossing west to the old stream channel.

In fall 2009, the unseeded area described above, approximately six acres north of the northern railroad tracks, was composted, fertilized (Mix A), and seeded with the subirrigated mix by Western Reclamation. Additionally, a blend of several seed mixes was used where transplanting equipment had caused excessive damage to revegetation.

All but a little transplanting was implemented by a professional crew in spring 2009. Among other plants, about 14,500 10T woodies (about 10 cubic inches in root volume) were planted on streambanks and another 31,000 in the floodplain. Another 42,000 wetland herbs (3-4 cubic inches) were planted in the floodplain and along banks.

8.3.2.2 Canopy Coverage

Reach J was sampled with four transects. Lack of weeds, both annual and noxious, remains impressive [Table 8-6]. A summary of total and perennial plant cover follows. Plant cover was down at several transects relative to 2011, but it remains very high. Legumes strongly bolster plant productivity and cover here.

Table 8-6. Comparative perennial[36] canopy coverage for sample transects in Reach J, 2011 and 2014.

Transect	Hydrologic Zone	Perennial Cover (%)		Comments
		2011	2014	
85	Transition/Subirrigated	88	69	Grasses, legumes, diverse.
86	Subirrigated	108	94	Grasses, legumes.
87	Upland	125	106	Legumes, grasses, shrubs
90	Subirrigated to Upland	108	131	Legumes, intro. grasses.

8.3.2.3 Shrub and Tree Density

Table 8-7 summarizes woody plant (mainly shrub) densities along sample transects. Species and heights are elaborated in Appendix K and N. Overall shrub density has declined since 2011 for several reasons ranging from salinity to over-topping and competition with grasses and legumes. No shrubs were seeded nor would they be desirable in the grazing area [Figure 8-8]. The only transplanting at the Hazlet property was around the pond margin (area was unsampled).

Table 8-7. Woody plant density summary for sample transects in Reach J, 2014.

Transect	Hydrologic Zone	Density (number/ha)	Main Species
85	Transition/Subirrigated	3,700	Various shrubs, trees
86	Subirrigated	3,400	Silver sagebrush, rabbitbrush
87	Upland	3,000	Sagebrush, rabbitbrush
90	Subirrigated to Upland	---	No shrubs seeded – grazing

[36] Excludes annuals, biennials, and noxious weeds.

Figure 8-8. The Hazlet's mowed their revegetation just to the west of Transect 90. I would guess about two/acre with no irrigation. Horses graze there too.

8.3.3 Reach K (Change Order 25)

This portion of Reach K is south of the Burlington Northern line but the remnants of an old partially contaminated stream channel remain. It is older than the rest of Reach K and monitored with two transects. Most of Change Order 25 is a revegetation showcase.

8.3.3.1 Revegetation History

Change Order 25 (Craddock's and Greenway; 28.5 acres total; 23.9 acres in Change Order 25 only) south of the Burlington Northern line was remediated in 2008. Change Order 25 was first seeded in spring 2009 without fertilizer due to time constraints. Most of the floodplain was composted, but not the old channel, which was then wet or even had standing water.

Following removal, the knoll or slope north of the Craddock house was re-graded with the resulting substrate trucked and pushed across Change Order 25 as needed to bring it to grade, but the depression of the old stream channel remained. In other words, the hill became the borrow source for the floodplain, but the old floodplain wasn't completely leveled. As coversoil, it was coarser than most Erickson borrow material. The primary texture was sandy loam with some loamy sand. It proved to be excellent for a variety of plants from sagebrush to alfalfa, cudweed sagewort to thickspike, wheatgrass and Indian ricegrass.

The Reach K floodplain north of the Burlington Northern line was seeded in 2011, so for now Change Order 25 and the rest of Reach K must be treated separately. In Change Order 25, both the substrate and delayed fertilization differed from most revegetation. The spring seeding provided another variable. These are noteworthy because of the fine sagebrush establishment in the eastern portion of Change Order 25.

The five-acre Craddock pasture east of Miles Crossing road was seeded with the grazing mix in fall 2008, earlier than the area west of the road. It is not monitored due to annual defoliation, and neither is the Craddock horse pasture west of the paved road.

Most of Change Order 25 was seeded in two passes (heavy and light) with the subirrigated mix. Bighorn Environmental Sciences hand-seeded around the ponds in the old channel, which at the time had quite a bit of water, using transition-zone mix seed from a previous year. The Craddock slope west of the paved road was seeded with grazing mix. The Craddock horse pasture east of the road, which was seeded the previous fall, was hand-interseeded in spring 2009 with an upland mix where some small rills had developed on the slope. Consequently, some small sediment deposition formed at the base of the slope.

Water in the pond and channel continued to drop, and standing water disappeared although moist soil remained. Bighorn Environmental Sciences hand-seeded freshly exposed dirt along the old channel in July. Then in fall 2009, Western Reclamation seeded the moist and salty revegetation mix in the unvegetated areas around what used to be ponds, but at that time were mostly dry channel bottoms.

Seeding the un-composted north-facing Craddock slope didn't take well. Transplanted Rocky Mountain junipers and ponderosa pines at first looked good on the north-facing slope, then died. Next, horses grazed this pasture pretty hard in 2011 and subsequently. In fall 2009, Western Reclamation composted the slope as best they could given the gradient, but without incorporation, and fertilized the slope. Western Reclamation seeded it with the upland coarse revegetation mix because the poor soil was better suited for shrubs than grasses. (What I call soil here was actually deep subsoil or parent material exposed by scraping and grading.) This was the final seeding in the Craddock area.

8.3.3.2 Canopy Coverage

Two transects are sampled in Change Order 25 [Table 8-8]. Cover and productivity are extremely high for upland sites. The old channel is so sinuous that a long linear transect can't be placed there, but I am considering adding one transect. However, some repairs may be implemented in portions of the channel.

Table 8-8. Comparative perennial[37] canopy coverage for sample transects in Reach K (Change Order 25), 2014.

Transect	Hydrologic Zone	Cover (%)		Comments
		Total	Perennial	
88	Upland to Subirrigated	115	115	Legumes, grasses, shrubs
89	Upland to Subirrigated	152	148	Basin wildrye, alfalfa

8.3.3.3 Shrub and Tree Density

Woody plant (mainly shrub) densities along sample transects are summarized in Table 8-9. The east end of Transect 88 has very high sagebrush density combined with plenty of plant cover and productivity.

Table 8-9. Woody plant density summary for sample transects in Reach K (Change Order 25), 2014.

Transect	Hydrologic Zone	Density (number/ha)	Main Species
88	Upland to Subirrigated	30,600	Big and silver sagebrush
89	Upland to Subirrigated	3,900	Sagebrush, rabbitbrush

8.3.4 Reach K (Outside Change Order 25)

This portion of Reach K is north of the Burlington Northern line above the crossover and the floodplain in lower Reach K, where a pond is situated. Following coversoiling, but not compost amendment, it was scoured by flooding. Revegetation here is younger than in Change Order 25.

8.3.4.1 Revegetation History

Most of this area was coversoiled in fall 2010. The creek-overflow channel between the Rarus and Burlington Northern lines (between Miles Crossing and the box culvert through which flows Silver Bow Creek) was seeded with subirrigated mix in fall 2010. I don't think it was composted-amended.

Streambanks were seeded with a bank mix before wrapping with coir fabric. Banks were overseeded as soon as flood waters receded into the channel in 2011. A subirrigated mix was generally used in the floodplain, but some areas were hand-seeded with a moist and salty seed mix. The technique was broadcasting and harrowing. After seedlings were established, the floodplain was fertilized with mix B containing potash.

Below (west of) the box culvert, compost was applied in fall 2010 but not incorporated, and it wasn't seeded. One pile of compost remained in floodplain south of the creek upstream of the

[37] Excludes annual, biennials, and noxious weeds.

Rarus railroad crossover. Most of the compost and a good bit of coversoil above the crossover were lost to flooding the following spring. At one point in June 2011, floodwaters covered the floodplain from the Burlington Northern railroad embankment on the south to the road bank on the north side, and the compost as well as considerable coversoil washed away except in one small area. Otherwise, most of the floodplain was scoured, whilst some small spots near the banks got fresh sand deposits, in places over 1-foot thick. These were hand-seeded when dry.

The Bighorn Environmental Sciences recommendation to seed the scoured floodplain was implemented first through hand-seeding and later, where needed, mechanized seeding. As flood waters receded in late June and to a greater extent in early July, the banks and floodplain were hand-seeded with repair mixes that emphasized light seed that establishes near or on the surface. The banks were seeded twice. By fall, plant diversity and abundance were excellent along banks except for sand deposits. Rocky portions of the floodplain also turned out well, but where erosion didn't cut down to rocks, hand-seeding had little effect. In fall 2011, Western Reclamation seeded those areas where hand-seeding hadn't been effective with a blend of subirrigated and transition-zone species. Given the small acreage, it wasn't worthwhile to map hydrology and seed subirrigated and transition-zone areas with different mixes.

Seeding the unamended, uncoversoiled floodplain generally worked. However, some contamination from the Burlington Northern line on the south is visually apparent and is also reflected in species composition. This zone lacks legumes. You can see this in Appendix I. More severe contamination is localized.

Below the crossover, and especially down by the pond in lower K, scouring was minimal. In addition to the banks, seeded as usual during construction, it was seeded mainly with subirrigated and upland in fall 2011. Then the creek was impounded for months, and some areas had to be reseeded. The area north of the creek dried first and was seeded as necessary in fall 2012 with upland and subirrigated seed mixes. The zone south of the creek was reseeded spring 2013 mainly with subirrigated mix. The zone nearest the creek and around the pond were hand-seeded with transition-zone mix in both fall and spring. Type B fertilizer (no potash) was applied. No compost was applied in Subarea 3 below the crossover.

8.3.4.2 Canopy Coverage

The first two 2014 transects (Transects 91 and 92), which are located above the box culvert, were quantified with seedling density counts [Table 8-10]. I then judged that the vegetation was suitably developed for canopy coverage, and I inventoried the final two transects that way.

The seedling densities in Table 8-10 are excellent and have a useful degree of diversity. Some open water occurs along Transect 91, so the seedling density is actually a bit better than indicated in Appendix J.

Table 8-10. Seedling[38] densities Reach K (outside Change Order 25), 2014. Both transects are primarily subirrigated with some transition zone hydrology. Density is expressed as mean number of seedlings per square foot followed in parenthesis by frequency (stocking).

Transect	Grasses	Forbs	Legumes	Shrubs	Total
91	2.6 (90)	----	0.6 (53)	<0.1 (6)	3.3 (90+)
92	3.1 (100)	0.1 (13)	1.2 (95)	0.1 (5)	4.5 (100)

Table 8-11 summarizes canopy coverage at the remaining two transects below the box culvert. Species composition is in Appendix J. Perennial cover now exceeds the desired conditions.

Table 8-11. Comparative perennial[39] canopy coverage for sample transects in Reach K (outside Change Order 25), 2014.

Transect	Hydrologic Zone	Cover (%)		Comments
		Total	Perennial	
93	Subirrigated	143	143	Legumes, grasses, shrubs
94	Upland-Transition	100	100	Basin wildrye, alfalfa

8.3.4.3 Shrub and Tree Density

Woody plant (mainly shrub) densities along sample transects are summarized in Table 8-12. I suspect that much of the sagebrush at Transect 93 will perish under the alfalfa canopy that has developed, and perhaps it already has, for the shrubs can hardly be seen.

Table 8-12. Woody plant density summary for sample transects in Reach K (outside Change Order 25), 2014.

Transect	Hydrologic Zone	Density (number/ha)	Main Species
93	Subirrigated	uncountable	Sagebrush now uncountable under alfalfa
94	Upland-Transition	600	Willows

8.3.5 Reach R

Reach R was not sampled in 2014, but a single sample from 2013 was inadvertently omitted from the 2013 report. This sample is in the Stimson amended area, an old borrow area leveled with extremely coarse *in situ* substrate (cobbley, gravelly loamy sand and sandy loam). It was

[38] Includes subshrubs to fit table format.

[39] Excludes annual, biennials, and noxious weeds.

amended with Stimson Organic Amendment, a wood by-product, which did not however qualify as compost. Approximately two inches was applied, which correlates with 6% organic matter when incorporated into the upper four inches of coversoil. It was seeded in spring 2006.

The woody amendment was supposed to improve revegetation by improving water-holding capacity, that being the assumed result of adding woody amendments. Since then, I experimented myself and learned the effect on water-holding capacity is influenced by both compost and dirt characteristics, but in any case, the change is so slight that the most careful experiment is required to quantify it. Reverse-fertilization from wood amendment also was unrecognized at that time.

Field notes for monitoring in Reach R in 2014 are contained in Appendix N. After eight growing-seasons plant cover is 42%, far below the desired condition. The main plant, accounting for two-thirds of relative cover, is alfalfa. Sheep fescue is a distant second, and tarragon third. Lots of bare soil and rocks remain exposed.

8.3.6 Reach S

8.3.6.1 Revegetation History

Most of Reach S was seeded in fall 2012, but the southern portion (an old borrow area north of Highway 1 and east of the creek) was revegetated earlier. From late-April to early-May 2006, we applied Big Butte-BioLogic compost to the dry southern half of the borrow complex, a little more than six acres. Since the objective was largely to physically improve the water- and nutrient-holding capacity of the gravelly, sandy substrate, an unusually high application rate of about 6% organic matter in the upper four inches was used. All areas out of water also were heavily fertilized with 40 pounds mineral nitrogen, 300 pounds potassium, and 20 pounds phosphorus per acre. The area was chisel-plowed to incorporate to about 4 inches depth.

The dry southern part of the gravel pit was seeded where necessary (it was partly vegetated) with a special mix for the coarse material. It was too rocky to drill, so it was broadcast seeded and lightly harrowed. After that, I went over it lightly (around two pounds/acre) with upland light.

Although 2006 was generally a decent year for precipitation, the lack of summer precipitation was particularly hard on young plants growing in very coarse substrates, including the southern gravel pit area. Only 1.3 inches of precipitation were recorded in Butte for July, August, and September combined, which is 35% of normal.

Hydrology was mainly subirrigated, but due to extreme coarseness, the site is effectively quite dry until plant roots reach groundwater, and groundwater elevation varies seasonally. No transplanting was implemented here.

The rest of Reach S except around ponds and a few wetter areas was seeded in fall 2012. Two contrasting substrates are present [Figure 8-9]. A zone near the stream but more of a roughly linear band following the stream zone, not conforming to each twist and turn of the creek, was coversoiled with a tan, light sandy loam.

The rest, easily distinguished not only by gray color but also by visible rocks, is *in situ*. The prevalent hydrology is upland; the stream is about 3.5 feet below the nearly level floodplain.

The coversoil was drill seeded using a heavy-seed mix followed by broadcasting light seed and a light harrow. Heavy and light seed were broadcast onto *in situ* dirt followed by a more aggressive harrow. Both worked pretty well, but I thought that overall the *in situ* dirt initially had more promising revegetation.

Transplanting was restricted to streambanks and around ponds. Details are not recounted here. All but a little of the floodplain was too dry for transplanting, so transplants play no role in this monitoring.

Figure 8-9. Tan coversoil on right was imported. Here, heavy seed was drilled followed by broadcasting light seed. Rocky, gray dirt on left is *in situ*; it was seeded by broadcast and harrow. Both techniques worked pretty well in Reach S.

8.3.6.2 Canopy Coverage

Most of Reach S, the part seeded in fall 2012, experienced a severe kochia infestation the following growing season due mainly to kochia stands within Reach S that were outside the remediation boundary. The kochia skeletons blew across the floodplain and filled the creek channel, plus kochia grew on compost piles. Kochia over-towered planted perennials [Figure 8-10] and got most of the soil water, nutrients, and sunlight. It comes as no surprise that Reach S revegetation is off to a mediocre start [Table 8-13].

After four canopy-coverage samples, I decided it was too early (too weedy) for this measurement and took seedling-density measurements at the remaining transects.

Table 8-13. Comparative perennial[40] canopy coverage for sample transects in Reach S, 2014.

Transect	Hydrologic Zone	Cover (%)		Comments
		Total	Perennial	
4-1	Subirrigated-Transition	58	58	Older revegetation
4-40	Upland	87	36	Annual weeds remain
4-41	Upland	68	36	Annual weeds remain
4-42	Transition	104	62	Annual weeds remain

Table 8-14. Seedling densities Reach S, 2014. Hydrology is primarily upland with one subirrigated and one transition zone transect. Density is expressed as mean number of seedlings per square foot followed in parenthesis by frequency (stocking).

Transect	Grasses	Forbs	Legumes	Shrubs[41]	Total
4-43	1.9 (83)	---	---	---	1.9 (83)
4-44	1.6 (93)	<0.1 (5)	0.3 (35)	0.4 (30)	2.4 (93)
4-45	2.7 (100)	---	---	---	2.7 (100)
4-46	1.5 (88)	---	---	---	1.5 (88)
4-47	0.9 (57)	---	<0.1 (5)	---	1.2 (67)
4-48	1.8 (92)	---	---	---	1.8 (92)
4-49	2.7 (100)	---	---	---	2.7 (100)

[40] Excludes annual, biennials, and noxious weeds.

[41] Includes subshrubs to fit table format.

Figure 8-10. Kochia skeletons in Reach S loaded with seed ready to detach and blow across the floodplain (upper photo; fall 2012). Appearance of Reach S in August 2013 (lower photo); note black dog barely visible in lower left corner just feet from camera.

9.0 SOILS[42]

9.1 INTRODUCTION

9.1.1 Impaired Soils

By impaired soils, I mean barren soils or those supporting fewer plants than nearby sites of similar properties or where vegetational composition has shifted to those species adapted to acidity or our main heavy metals, copper and zinc. Edaphic impairment of vegetation appears straight-forward until investigated, at which point generalizations are found to have many exceptions. Three causes of difficulty in explaining vegetational impairment follow:

- Additional unrecognized factors are at work. In several different investigations, heavy metals, acidity, and salinity alone or collectively failed to explain all vegetational impairment in the SSTOU.
- Clean wet sites are more productive than drier sites. Contaminated wet sites also can have a lot of plants. But moist sites, even if just vernally moist, can concentrate salts and metals through capillary rise. Thus, an enhanced soil moisture regime can push vegetation either way. Soil moisture regime is rarely investigated when inventorying potentially contaminated soils in the SSTOU.
- Adapted species can greatly increase the amount of plants growing in saline, contaminated, or acidic dirt. For example, unremediated SBC-11 has good cover of inland saltgrass despite [copper + manganese + zinc] of 13,000 ppm at pH 6. SBC-16's upland revegetation is obviously impaired with [copper + manganese + zinc] of 4,000 ppm. A location in Reach C once identified for soil sampling years ago as "No Veg #2" is now a sward of redtop).

9.1.2 Implications of Soils Monitoring

One question answered here is whether liming can play a useful role in repairing contaminated spots visible years after remediation. This requires information about soil pH and metal concentrations, but also other causes of vegetational impairment that would not be improved by liming.

9.2 METHODS

In Reaches A, B, C, and R (old Phase 1 west of the stream), 28 sample locations were subjectively chosen based on appearance of contamination. At some sites, impairment is severe and obvious. But I chose to focus on more subtle vegetational clues. These sites may have

[42] Chapter 9 was prepared by Rich Prodgers of Bighorn Environmental Sciences (Dillon, Montana) with minor editing and formatting by RESPEC.

reduced plant abundance in conjunction with plant litter from dead plants, or the species composition may suggest contamination/acidity [Appendix L]. A few soils where I suspected contamination turned out to be relatively clean, but as noted previously, additional unrecognized factors may be at work.

In field sampling, a single aggregate sample representing the upper half-foot of dirt was blended from three subsamples located within five meters of the initial sample for which the location was recorded. If dry, they were blended through collective sieving. However, many soils were too wet to sieve. I mixed these as best I could, but they could not be blended nearly as well as dry samples. This shows in the data, where characteristics measured by two labs, such as salinity (electrical conductivity or EC) and pH, differ more than usual. In some cases, the 6-12-inch-depth interval also was sampled.

Soils were analyzed at two laboratories. The MSE lab in Butte specializes in the "ARCO five" (arsenic, cadmium, copper, lead, zinc), to which I added manganese. Manganese often reaches higher concentration than the others and also, when elevated, interferes with plant metabolism. In describing contamination, I summed the concentrations of copper, manganese, and zinc, expressed as [copper + manganese + zinc]. These are the three main players as far as plant performance goes, but in this investigation the lead concentration was about 80% of copper. The Agvise Lab in Northwood, North Dakota, measured fertility. Both labs measured pH and electrical conductivity (EC, salinity) from saturated paste.

Results are summarized as means. This is not strictly correct for pH due to the log function. Years ago, I took the antilogs, calculated the means, then took the log, but it mattered little for values within a restricted range. For this investigation, I simply calculated the mean for reported pH values. In ecology, the extremes are usually more important than the means, which nonetheless portray average conditions for normal distributions.

9.3 RESULTS

Soil characteristics for all 28 samples are summarized as means and ranges in Table 9-1, while locations are plotted in Figure 9-1, Figure 9-2, Figure 9-3, and Figure 9-4. The data indicate a continuum of contamination from clean sites to strongly contaminated ones. The most contaminated sites strongly influenced mean metal concentrations, but only 36% of sites had metal concentrations [copper + manganese + zinc] above the mean.

To answer the lime question, the mean pH of seven in Table 9-1 indicates that acidity is not prevalent. Only three of the 28 samples (11%) had pH <5.5 as reported by at least one soils lab. They were not, in general, the most contaminated; mean [copper + manganese + zinc] was 3,320 ppm (i.e., about half the mean). With moderate metals, plant performance likely would be fair if pH was brought to neutrality. But acidity just isn't common enough to make liming a useful strategy on significant acreage. This echoes results from an earlier investigation [Prodgers and Keck, 2008], where acidity alone (defined as pH <5.5) explained vegetational impairment at just 10% of sites. Acidification of coversoil was uncommon. However, every coversoil with pH <5.5 had extremely impaired revegetation with an average of 9% plant cover.

Turning to COCs including manganese, it had the highest concentration, about half again the zinc concentration. At the same time, lead was much closer to copper in concentration than I, at least, expected. One might, with justification lump lead with copper, manganese, and zinc in summarizing metals. However, since they are all collinear to a large extent, one suspects that little additional vegetational impairment would be explained.

Table 9-1. Means and ranges for measured soil characteristics in the upper half-foot. Higher concentrations sometimes occurred in the second half-foot.

Element or Property	Unit	Mean	Range
Arsenic	ppm	140	10-790
Cadmium	ppm	5.2	0.2-23
Copper	ppm	1,230	20-4,570
Manganese	ppm	3,200	210-17,000
Lead	ppm	990	10-6,550
Zinc	ppm	1,980	60-10,700
[Copper + Manganese + Zinc]	ppm	6,400	465-32,270
Organic Matter	%	2.4	0.9-6.4
Nitrate	ppm	3.4	0.5-40.5
Ammonium	ppm	2.4	0.1-6.5
Olsen Phosphorus	ppm	23	4-100
Ammonium Acetate Potassium	ppm	480	100-1,150
Electrical Conductivity	dS/m (mmhos/cm)	3	0.1-10
pH	standard units	7	4.8-8.2

With the huge ranges in Table 9-1, the means in many cases do not represent a common condition. Stratifying [copper + manganese + zinc] into three classes with their individual means presents a fuller picture of contamination: Class 1 (ppm [copper + manganese + zinc] <1,000; Class 2 (ppm [copper + manganese + zinc] 1,000-3,999; and Class 3 (ppm [copper + manganese + zinc] >4,000.

Figure 9-5 shows the mean metal concentrations for each class, whereas Figure 9-6 shows how many samples comprise each class.

With regard to macronutrient fertility, mean phosphorus (P) and potassium (K) are fine. Five of 28 soils had low Olsen phosphorus (defined as <10 ppm). Three soils had low potassium in the 100-130 ppm range, none of them the same soils exhibiting low phosphorus. I would characterize all as suboptimal but not likely responsible for visibly impaired vegetation.

Figure 9-1. Soil sample locations Subarea 1, Reach A.

Figure 9-2. Soil sample locations Subarea 1, Reaches D and E.

Figure 9-3. Soil sample locations Subarea 2, Reach G.

Figure 9-4. Soil sample locations Subarea 4, Reach R.

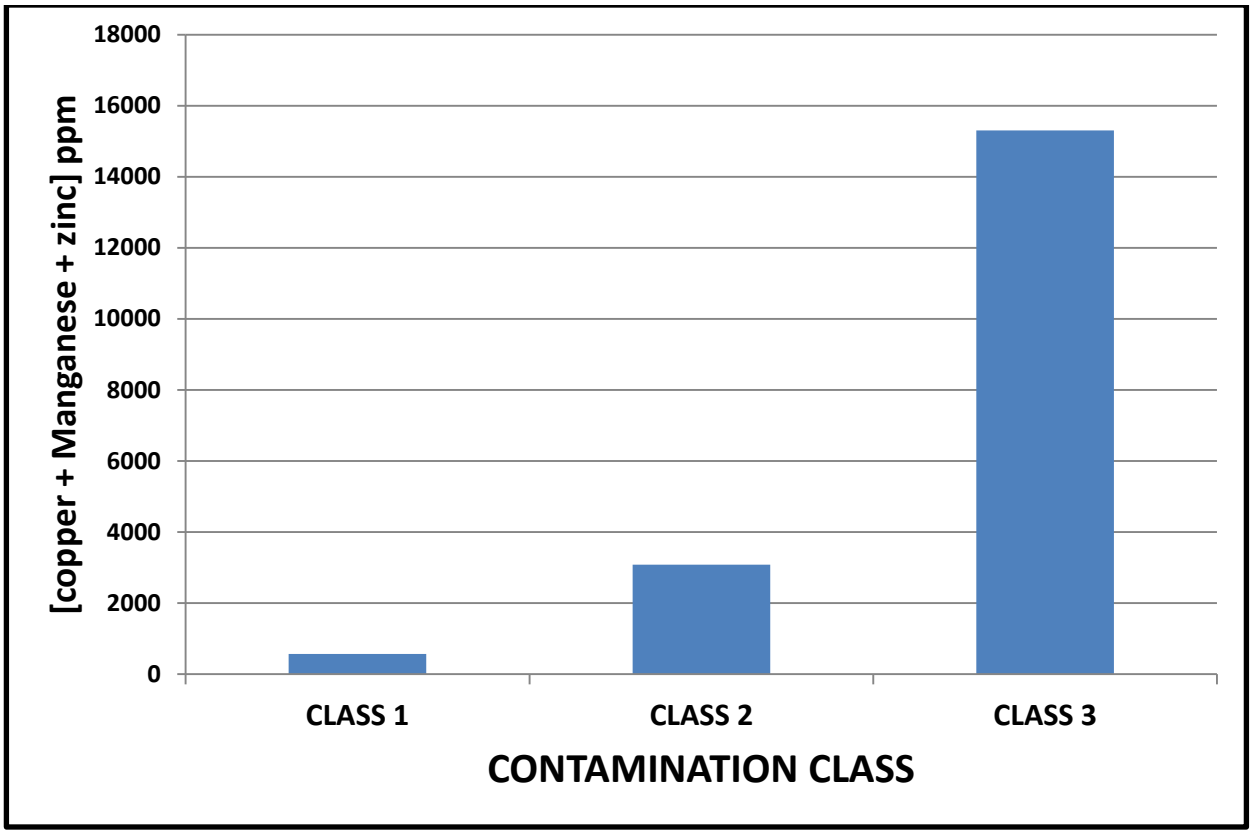

Figure 9-5. Mean metal concentrations (copper plus manganese plus zinc) in three soil classes.

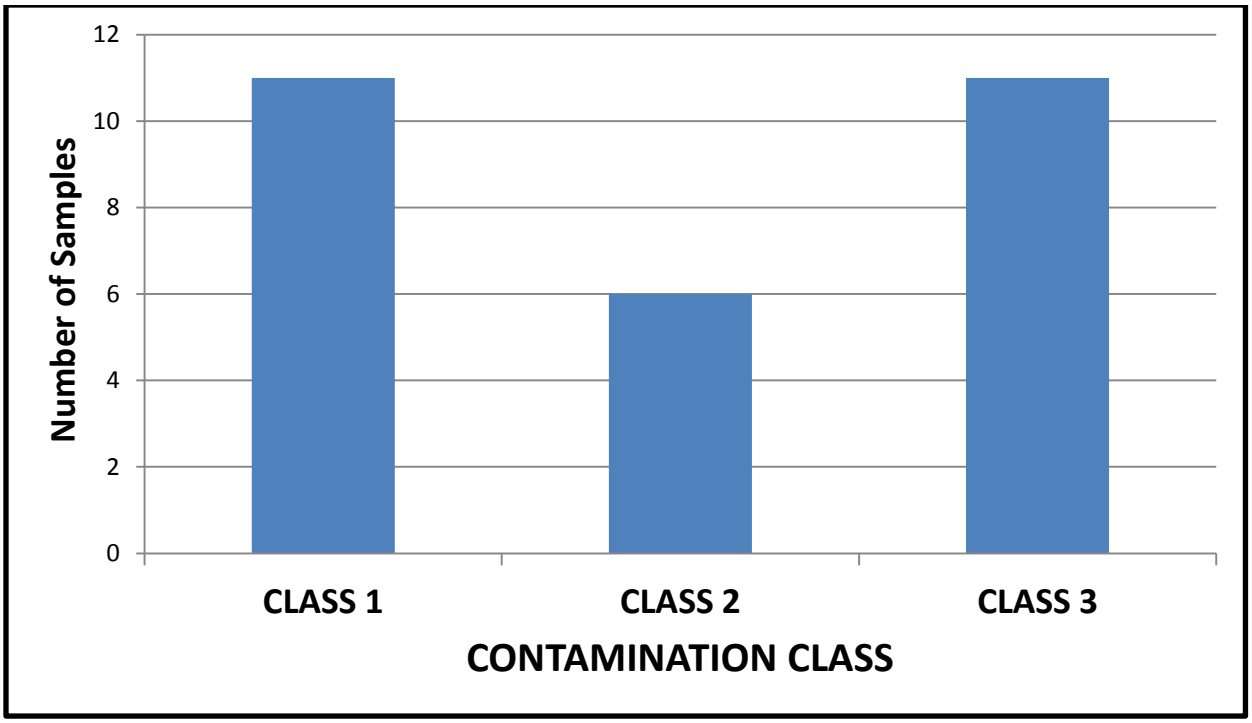

Figure 9-6. Number of samples in each of three contamination classes.

As a generalization, mineral nitrogen (nitrate and ammonium) is often plant-limiting late in the growing season here. That said, and remembering that we hoped that compost amendment would initiate and promote nutrient cycling via diverse organic matter decomposers, all but three soils samples had <3 ppm nitrate. Most had between 0.5-1 ppm nitrate. When we recall that some portion of the soil volume is not well exploited by plant roots, this is effectively no nitrate at all. Of the three samples with lots of nitrate, one (SBC-10) is acidic, unremediated, and vegetated with old willows and redtop. Site SBC-11 is contaminated, unremediated, and supports a sward of inland saltgrass. Site SBC-22, a site with 11 ppm nitrate, was pretty barren where sampled. The general condition for remediated sites in late summer was nitrogen impoverishment.

Most soils exhibited more organic matter than can be attributed to initial content plus compost amendment. In other words, most sites appear to have accrued organic matter through revegetation. This could be a good thing, or it may indicate lack of a soil food web. (The second in my opinion is more likely.) If so, nutrients in organic matter would remain unavailable to vascular plants due to microbial inactivity.

It would seem intuitively obvious that the less contaminated soils would grow more plants and enrich soil organic matter. But even this pretty theory collides with ugly fact. Figure 9-7 shows no trend between metals and organic matter. Three of four samples with <1% organic matter were not composted. As a generalization, mineral nitrogen (nitrate and ammonium) is often plant-limiting late in the growing season.

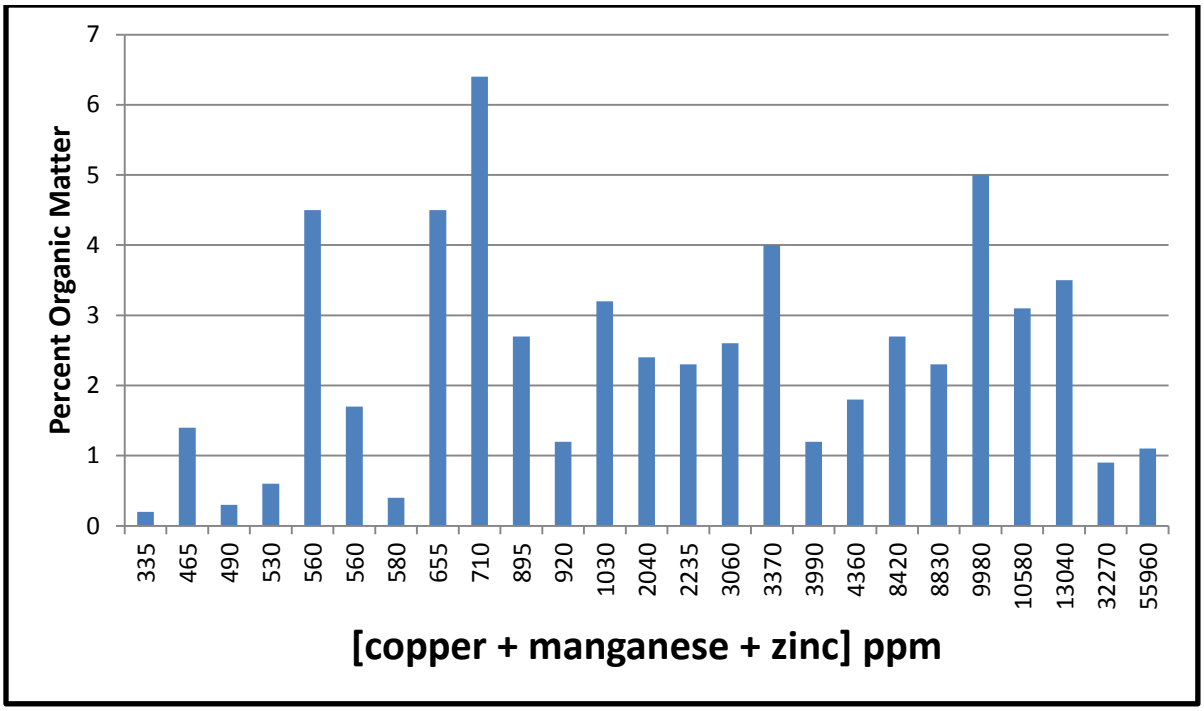

Figure 9-7. Soil organic matter as a function of metal contamination.

Salinity can cause SSTOU revegetation impairment. From the 2005 investigation [Prodgers and Keck, 2008)], "Salinity/sodicity is the most common source of impairment recognized by this investigation. Salt impairment was twice as common as metals impairment."

That was not the case in the current investigation, where salinity was more of a contributing factor. Depending upon the reference authority, 4 dS/m is the threshold for saline or moderately saline soils, whereas ≥8 dS/m is considered strongly saline. I am defining 5 dS/m for the upper 0.5 feet as the threshold for concern, although the 0-2 inch depth interval can have considerably greater salinity than the upper 0.5 foot depth interval as a whole. Using that threshold, six of 28 samples were salty enough to impair revegetation, particularly in conjunction with other limiting factors.

10.0 BIRDS[43]

10.1 INTRODUCTION

Bird use was first monitored in Subarea 2 in 2007, when revegetation was essentially complete. It was sampled again in 2008, 2009, 2012, and this year (2014). Key questions include how fast and how much bird use establishes following remediation, and how it changes through time. In Subarea 4, Reach P was first sampled in 2010 and the other reaches as they were completed through 2014 when Reach T was completely vegetated, but visually dominated by annuals (Rocky Mountain bee plant and kochia). Habitat was destroyed in Reach C by Town Pump. Trail construction and trail use there by people and dogs discourage shy birds such as herons, much waterfowl, and many raptors.

Bird use is of course tied to habitat, notably shrub and tree height (perching diversity), food (e.g., currants and silver buffaloberries), and thermal and escape cover. MacArthur [1964] divided foliage by height into three classes generally corresponding to herbs, shrubs, and trees. He measured the foliage density in each stratum and quantified it with a proportional abundance index (Shannon, the one used here). He found a linear relation between foliage height diversity and number of bird species. This was corroborated on other continents.

The two principal habitats in SSTOU are, 1) steppe and meadow (grassland including alfalfa) in the floodplain, and 2) open water and riparian habitat. Riparian habitat often develops into tall shrub communities. Water, especially ponds, can be a key habitat factor present when construction ceases. Some types of birds increase in response to vegetational development; others prefer a more open or secluded habitat. In any case, vegetational development is not the sole determinant of bird use.

One fundamental question has always been, 'how much change or variance in bird use occurs from day to day by chance alone?' This year we investigated this question in Subarea 2 by sampling twice with sample periods one week apart. Bird use was sampled on eight dates in 2014 in Subarea 2 rather than the usual four sampling dates. The regular sampling occurred as the end of the named month (SOP) and sampled again one week later in the first few days of the following month. In the graphs, you will see two bars for each month in the histogram even though the second one may technically be in the following month.

10.2 METHODS

Nate Kohler has sampled birds from the start. Methods and station locations remained unchanged, but the final four locations in Subarea 4 were added. Sampling occurred at the end of each named month with the exception noted in the preceding paragraph. Subarea 4 was

[43] Chapter 10 was prepared by Rich Prodgers of Bighorn Environmental Sciences (Dillon, Montana) with minor editing and formatting by RESPEC.

sampled from the top down visiting each station sequentially in the order they are numbered. In Subarea 4, where stations are on both sides of the creek, the sequence is 25-29 (south of Silver Bow Creek), then 21-24, and finally 30-40 (all on the north side). Bird sampling locations in Subarea 2 are on Maps 8 through 12. Subarea 4 bird sampling locations are on Maps 24 through 34, excluding Map 29.

To be included in the species list or counted at a station, birds must use habitat within the remediated area, in so far as it is possible to determine, and not merely fly over. To be listed, they need not appear in sample data (i.e., they can be observed while moving between sample locations or on non-sampled dates). Species can also be added by reliable observers, other than Nate, whenever they are observed using the remediated zone.

10.2.1 Data Analysis

After revegetation is complete, each subarea is evaluated separately in temporal rotation. Number of birds counted is one measure of use, as is species richness. Data are always stratified by reach. Counts can be evaluated with two denominators: temporally (by month and year) and by station.

Counts at first seem straight-forward, but eruptions can complicate use patterns. A flock of 100 snow geese may use a pond for a short time and, by chance, either be counted or not. Cliff swallows are tied to bridges and typically don't arrive until May. To further complicate their influence on the bird inventory, they are late risers and the bird survey starts at dawn, so the count can be influenced by the direction in which a subarea is sampled (from top to bottom or bottom to top), depending on bridge locations. Sometimes we arbitrarily limit the count of cliff swallows in data analysis so that monthly use by all species can more clearly be seen, but there was no need for this in 2014.

Another number, the Shannon index (called equitability) quantifies evenness of relative abundance. (Relative abundance means the counts are converted first to percentages.) It was calculated here using natural logs. For example, in 2009, 348 birds were counted on April 4 representing 21 species. But 63% of those birds consisted of just two species: mallard ducks and Bohemian waxwings. The Shannon value for species was 1.89. If each species had been represented equally (the mean of 16.6 birds/species), equitability would be maximized at 3.04. The only way that number could increase further would be if the number of species increased; since the calculation is based upon relative abundance, increasing the number of individuals would have no effect. If all 348 birds were of the same species, the Shannon value would be zero. There is no Shannon value for zero birds, which can happen when evaluating station use, in which case a zero is entered when summing the individual Shannon values for each station.

Among the parameters summarized are:

- Count and list of all bird species observed in Subareas 2 and 4.
- Total number of birds by month from standardized counts.
- Species richness and species use by month.
- Bird quantity and species per station.

- Shannon index (sometimes called equitability and here calculated using natural logs) for species and stations.
- Sorensen [1948] similarity index or coefficient.

Comparisons are made to previous bird monitoring reports [Prodgers 2008; 2010b; 2013b; 2015].

10.2.2 Role of Chance

This year, the effect of sampling on two dates one week, or less, apart was investigated. Bird sampling differs fundamentally from vegetation sampling by virtue of mobility. Standardized methods are extremely important to support comparisons. Even so, the variance among observations can be rather large due to the brevity of sampling and rapid changes in bird use, especially in late winter. Each subarea is sampled one morning per month in less than four hours starting just after the pre-dawn chorus diminishes. The actual time spent sampling each station was five minutes.

10.3 RESULTS AND DISCUSSION

The cumulative summaries provided here blend sometimes contrary trends for individual species and can mask differential use by habitat specialists. Treating birds as mere numbers can mask changing species and quantities of those species (what is called species composition). The current bird species lists for Subareas 2 and 4 conclude each section.

10.3.1 Subarea 2

10.3.1.1 Effect of Sampling Date

How much does simply sampling on a different date influence bird use and diversity? Do data reveal temporal trends or simply oscillations? These issues are investigated first because they may color our interpretations of between-year comparisons.

Sampling additional dates as in 2014 inevitably resulted in more species being observed as more transitory bird use is recorded. Of the 16 fresh species observed in 2014, 10 were seen on the first date and six on the second date. Since the interval between the paired dates is one week and the next sampling is three weeks away, this is about what one would expect. Some of the second date additions might have been picked up the next month, or missed.

The net effect of sampling date on mean species sampled for all four months is about 1%. In other words, more birds may be observed on the early date one month and the late date in another month; random plusses and minuses cancel. Looking at each month individually, the mean absolute difference between dates was 12.5%. March, when the difference was about 20% [Figure 10-1], showed the biggest proportional difference.

Retaining our focus on species, the mean number of species per station is shown in Figure 10-2. The effect of sampling date is greater in the early months, probably because migratory

fowl are more prevalent then. It may or may not be coincidence, but sampling even a few days later netted about 13.5% more species in March and April. The difference in May and June was negligible.

Species equitability [Figure 10-3], like species sampled and spatial use of Subarea 2 [Figure 10-1; Figure 10-2], showed more effect of sampling date in the early two months (16%) than in June and July, which hardly differed. Summing up so far, the effect of date on species is more pronounced in March and April than later in spring. A later sampling date tends to capture more species more equitably distributed, a trend seen also in other years and areas.

Turning now to bird abundance, the biggest relative differences once again are in the earlier two months [Figure 10-4], but this time a later date does not necessarily connote more birds. This is understandable because migratory bird use can be transitory. In the short term, arrivals and departures are unpredictable. Equitability among stations [Figure 10-5] again showed most difference in April and May, and again the later date experienced greater equitability.

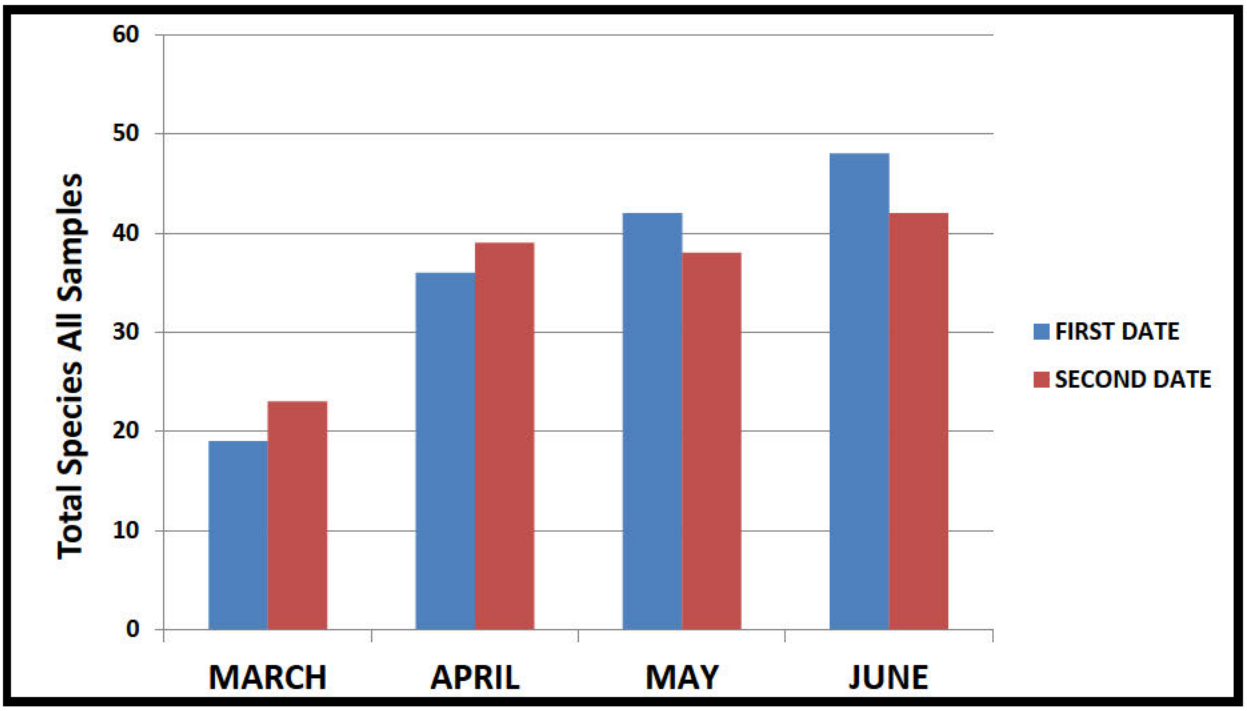

Figure 10-1. Species sampled.

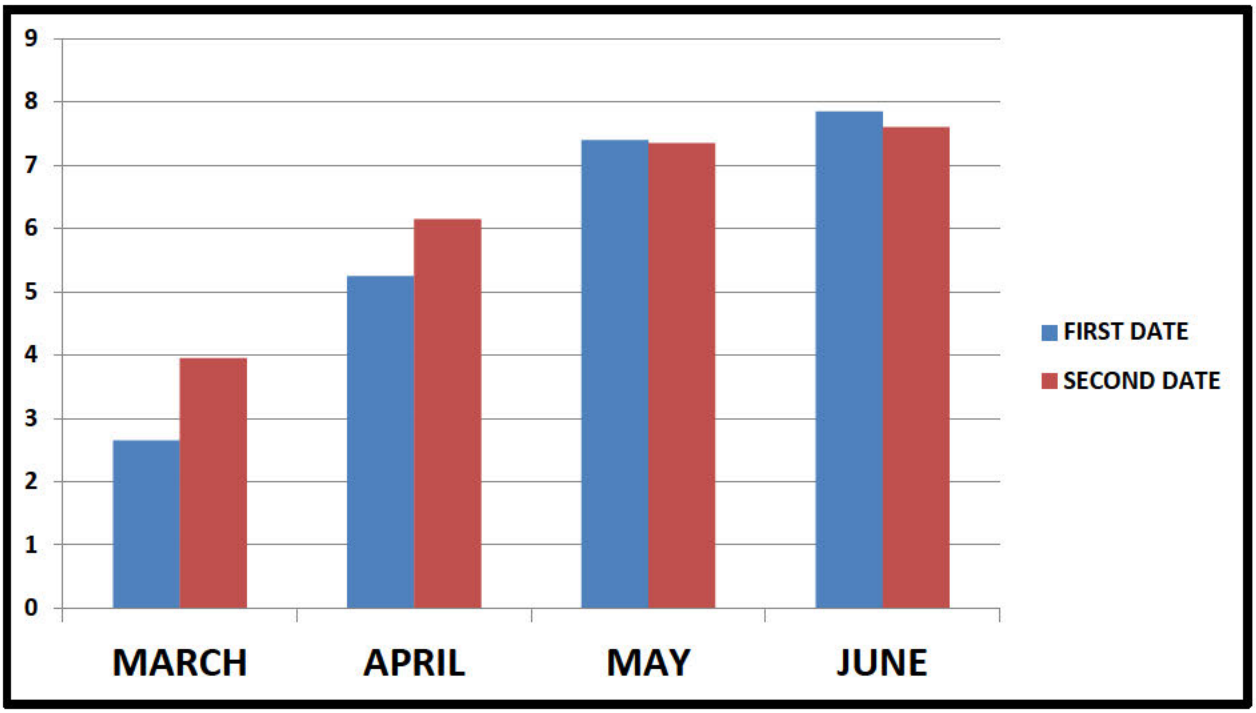

Figure 10-2. Mean species per station.

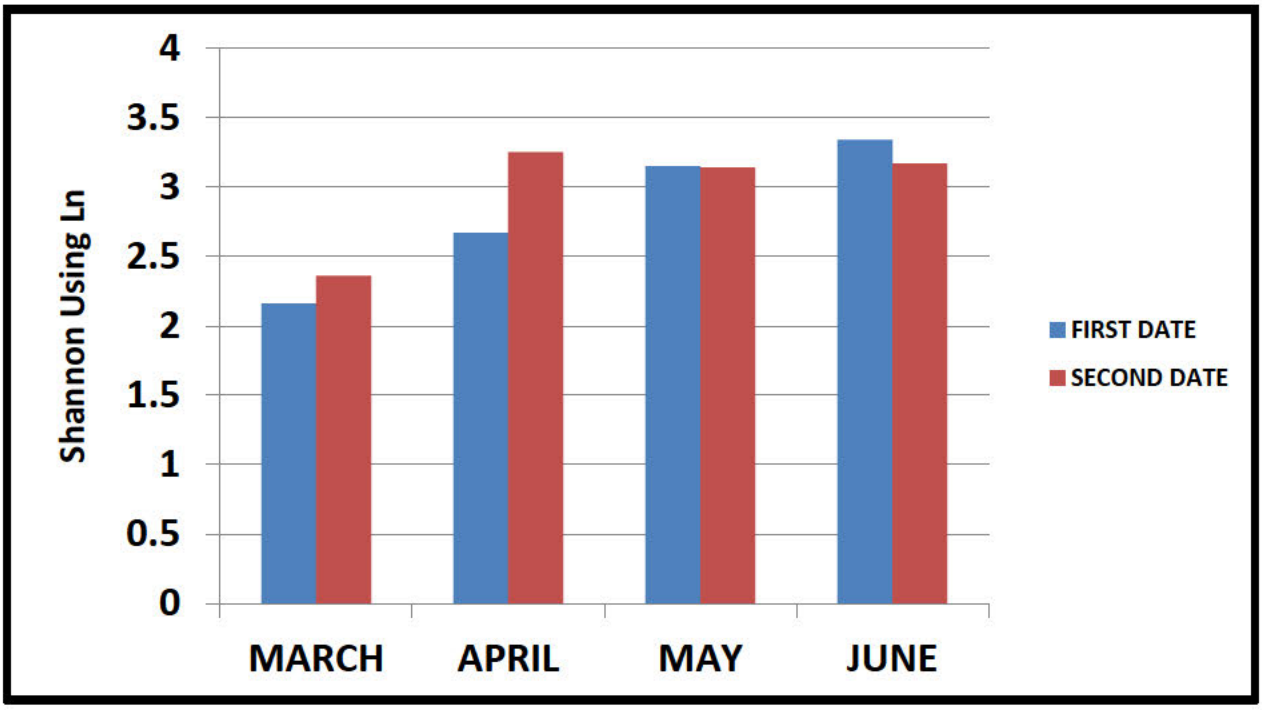

Figure 10-3. Species equitability.

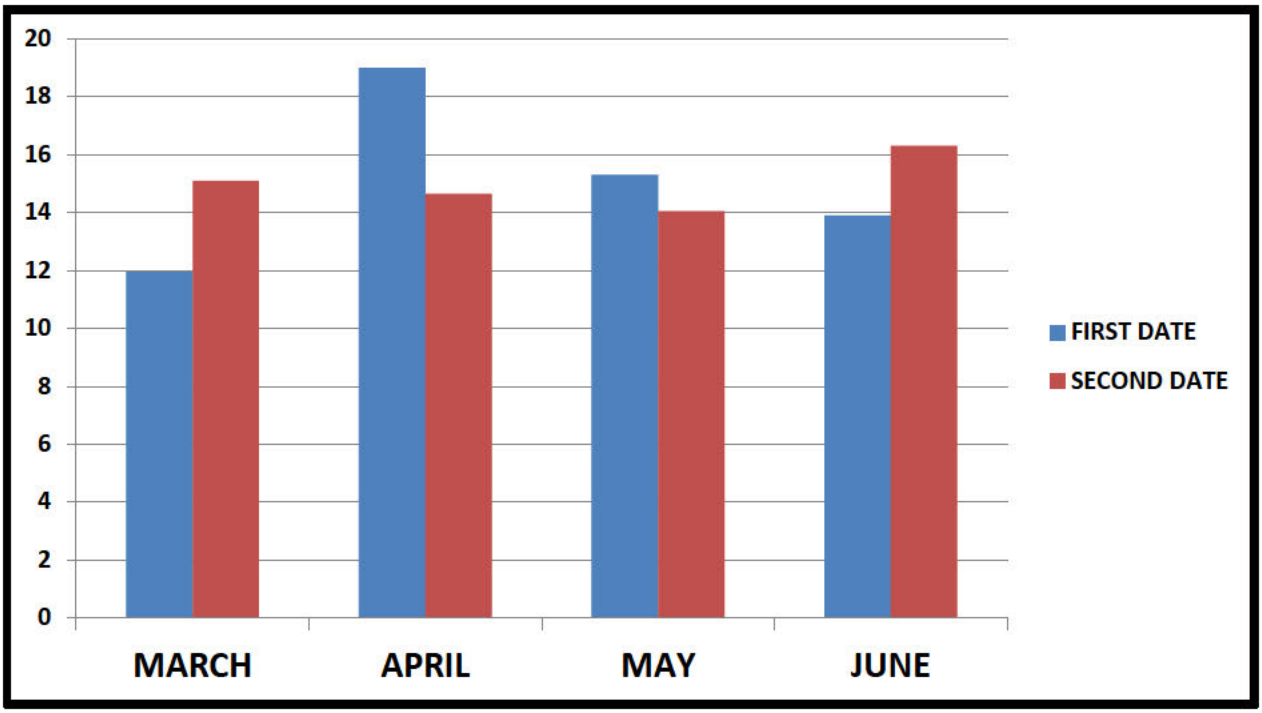

Figure 10-4. Mean birds per station.

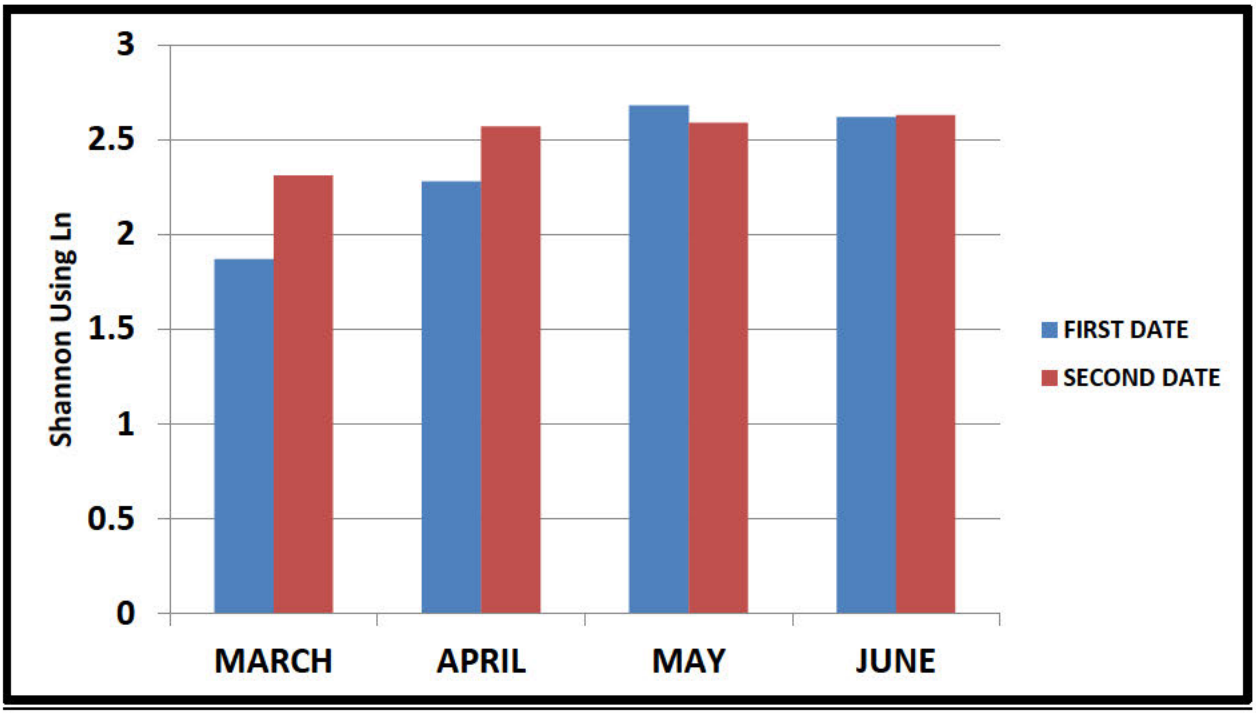

Figure 10-5. Bird count equitability among stations.

Summing up, when considering between-year trends in bird use, look for a difference of about 20% for most parameters in March and April to denote real change. In May and June, a difference of about 10% in most parameters is likely to be significant.

It would be possible to compute similarities for each parameter in Figure 10-1 through Figure 10-5, but it would be, perhaps, too much of a good thing. I chose to focus solely on species composition using Sorenson's coefficient (K) to compare monthly results [Sorenson, 1948]. The advantage of Sorenson's coefficient is that a community compared to itself is 100% similar, which is not true of all similarity indices.

Similarities range from about half in April to three quarters in June. The similarities below, as most other data so far, show that sampling on two dates in March and April shows lower similarity (less homogeneity) than sampling on two dates in May and June. Still, the highest similarity in species composition was only 75%. Similarity was 64% in March, 52% in April, 70% in May, and 75% in June.

We conclude with an anecdote involving two different subareas, but at the same time illuminating variable results associated with sampling date. On April 29, while sampling Subarea 2, 87 swallows were counted at the last 10 stations. Of those, 81 were tree swallows. One day later in Subarea 4, just two tree swallows were counted. Nate wondered whether the results might have been reversed if sampling dates were switched. Big differences in bird quantity over a few days can result when typically abundant species first appear (migrate to) portions of the SSTOU.

10.3.1.2 Bird Abundance and Equitability

We now move to between-year comparisons for Subarea 2, arguably our "birdiest" subarea. Bird use (number of birds counted at stations) in Subarea 2 over eight years (five samplings) is summarized in Figure 10-6. There was less difference among years in 2014 than in prior years. Part, but not all, of this leveling resulted from plotting (in 2014) the mean number of birds for the two paired dates as explained in the previous section; this attenuates the daily or weekly dynamic. The usual trend is that bird use is much higher in spring than in late winter. Due to the peak in April 2009 (snow geese), which required a bigger *x*-axis, Figure 10-6 makes annual bird use seem more consistent than would appear if the *x*-axis range were 0-25 birds per station. The fact remains that gross bird use seems to plateau after just a few years while the annual dynamic plays out.

Figure 10-7 shows that station equitability is a little lower than species equitability, but of course there are more species than stations too. Two things are evident from Figure 10-7. First, equitability has increased over time in May and June. Second, the seasonal equitability pattern apparently is becoming more orderly.

One anecdote relates how temporary conditions can affect equitability among stations. During the March sampling, all of the ponds were frozen except for portions near Stations 26 and 29. This had the effect of concentrating much waterfowl activity near those two points. One hundred and twenty five individuals comprising 11 species were recorded then at Station 29, and seven of those species were waterfowl.

10.3.1.3 Species

Figure 10-8 reflects the number of species recorded from station sampling. Whereas gross bird use hasn't changed much over time in May and June [Figure 10-6], species richness has generally trended upward through time, with 2012 and 2014 being more similar than other years. One hundred and seven bird species were observed in Subarea 2 through June 2014. Of these, the spotted towhee, Forster tern, marsh wren, solitary sandpiper, and Clark's nutcracker were first observed using the SSTOU this year.

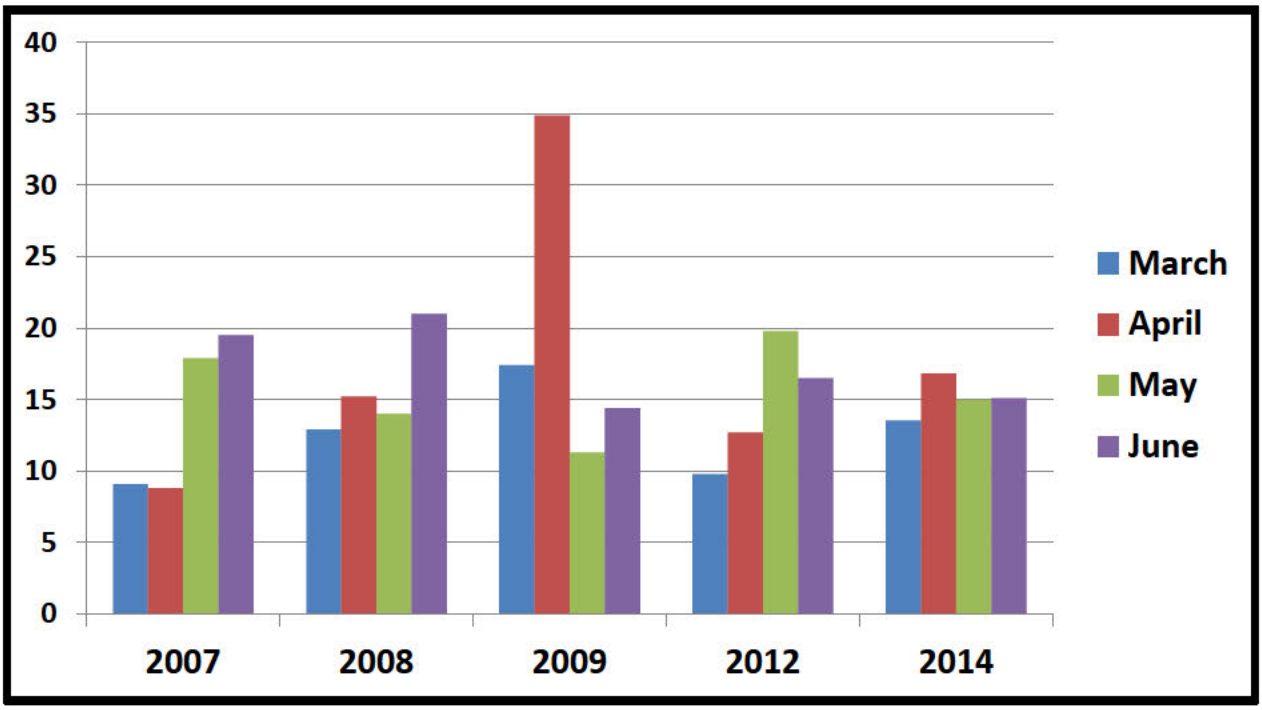

Figure 10-6. Mean birds per station.

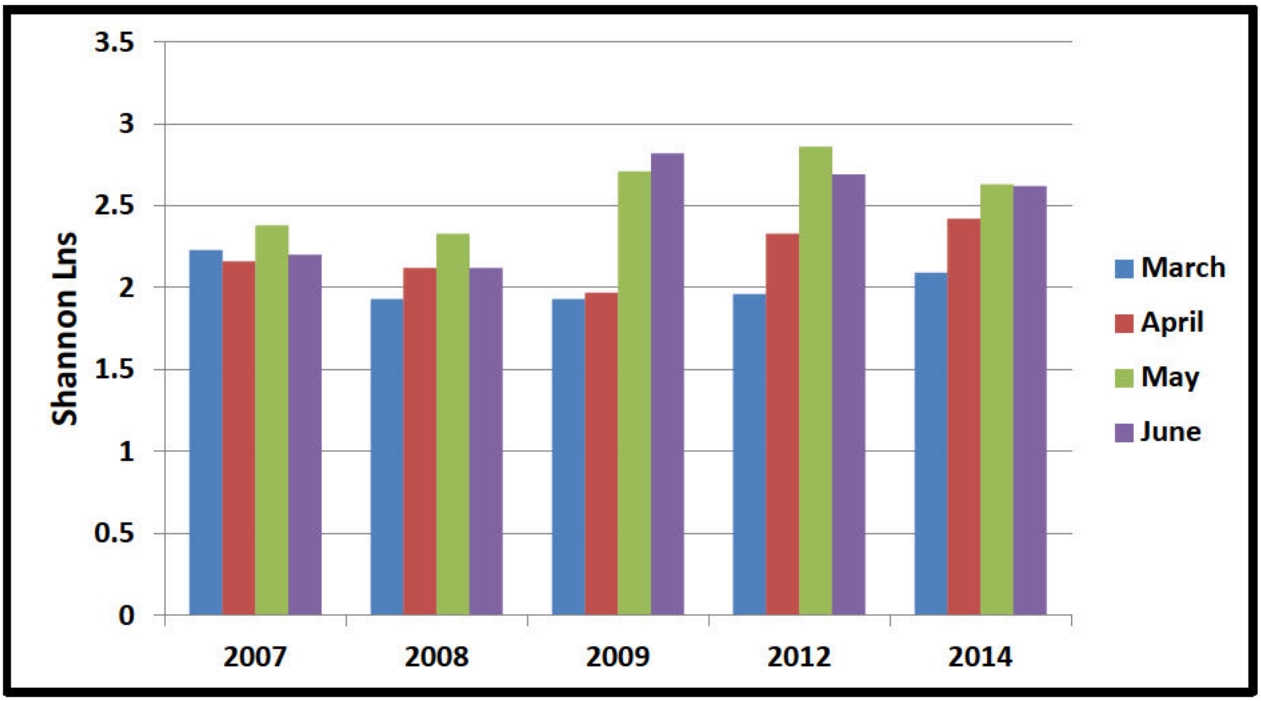

Figure 10-7. Species equitability among stations.

Table 10-1. The 14 species observed in Subarea 2, but not (so far) in other subareas of Silver Bow Creek.

Species	Species	Species	Species
Black tern	Lesser yellowlegs	Red-breasted merganser	Western grebe
Black-necked stilt	Marbled godwit	Rough-legged hawk	Willet
Bohemian waxwing	Marsh wren	Solitary sandpiper	
Forster tern	Pied-billed grebe	Spotted towhee	

Due to the fickle short-term dynamic, assessing changing bird species use is difficult. We know that similarities in species composition can differ by 25-50% in just a few days. An anecdote may make this more concrete. In June on paired dates, the number of savannah sparrows was 31 both days, but the number of Brewer blackbirds was one on one date and 17 on the second date while the number of yellow-headed blackbirds was 11 on one date and 27 the second. Add to that the fact that the SSTOU habitats (e.g., wetland, riparian, floodplain, upland) accommodate much temporary use and it becomes clear that species trends are tenuous.

One species and habitat specialist that shows a fairly clear trend is the willow flycatcher. Their preference for riparian willow and alder habitat with tall shrubs of requisite height and density makes them a good indicator species. Unfortunately, this species is one of the latest breeding birds to arrive in this region. Typically, it is found on territory sometime in the first week of June, or occasionally late May, and generally at lower elevations.

The following data for June (with one early July sampling date) from Subarea 2 show that willow flycatcher use has increased coincident with willow development [Table 10-2]. This species has not yet been detected in Subarea 4, which is developing willows in Reach P. Willow flycatchers were also absent (or missed) during the single sampling of Subarea 3, despite there being a few suitable patches of suitable pre-remediated habitat present in the lower canyon area.

It is likely that this flycatcher species will begin use in the more recently remediated reaches once the riparian shrub height and density attain the levels seen in Subareas 1 and 2.

A more ubiquitous bird is the savannah sparrow, which on June 4 was observed at 19 of 20 stations. This was breeding season.

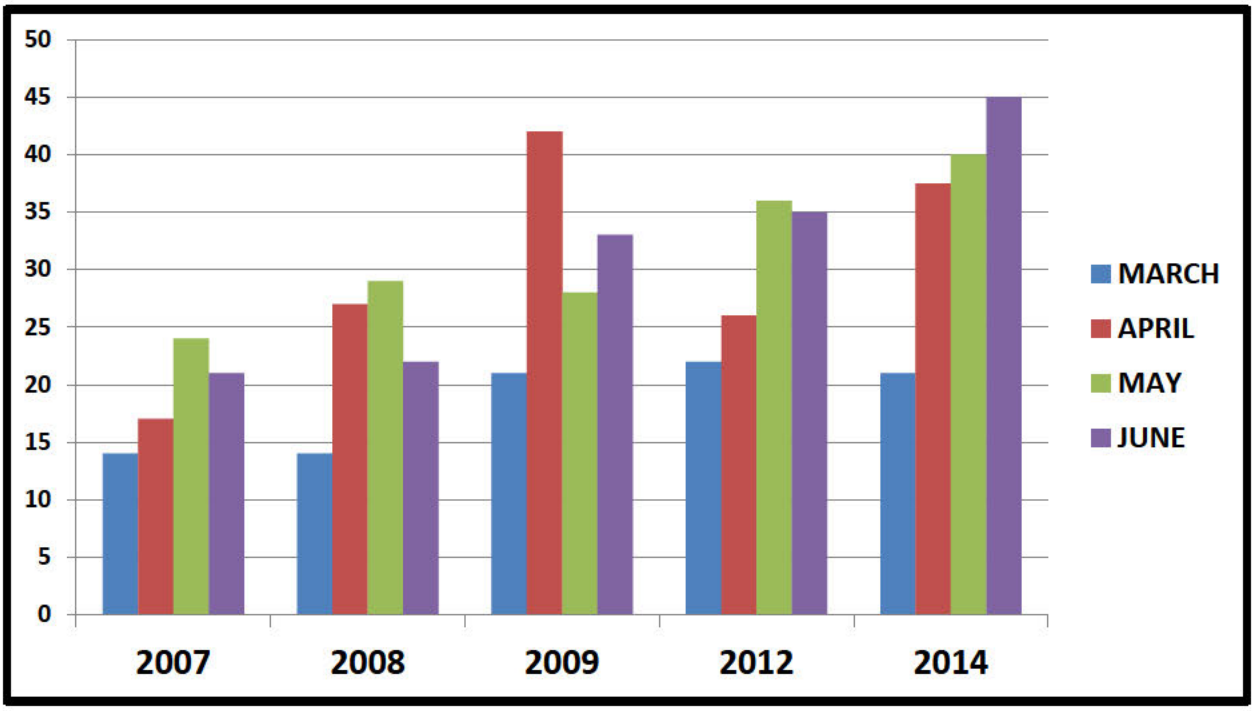

Figure 10-8. Species richness, 2007-2014.

Table 10-2. Willow flycatcher sightings in June samplings, Subarea 2.

Date	Individuals	Stations
6/22/2007	0	0
6/9/2008	0	0
6/27/2008	0	0
6/27/2009	0	0
6/26/2012	2	2
6/4/2014	5	5
6/29/2014	9	9
7/6/2014	5	5

Another species metric is the average number of species sampled per station as indicated in Figure 10-9. Seasonal use in 2014 was similar to 2007, but 2014 had more species in every month. The trend has been for more species each year with a notable amount of variance among years and between months. Comparing 2014 to 2007, the increase in species per station for all months was 36%. The increase in March, April, and June was consistent at about 42%. May was more similar with just 16% more species in 2014 than in 2007.

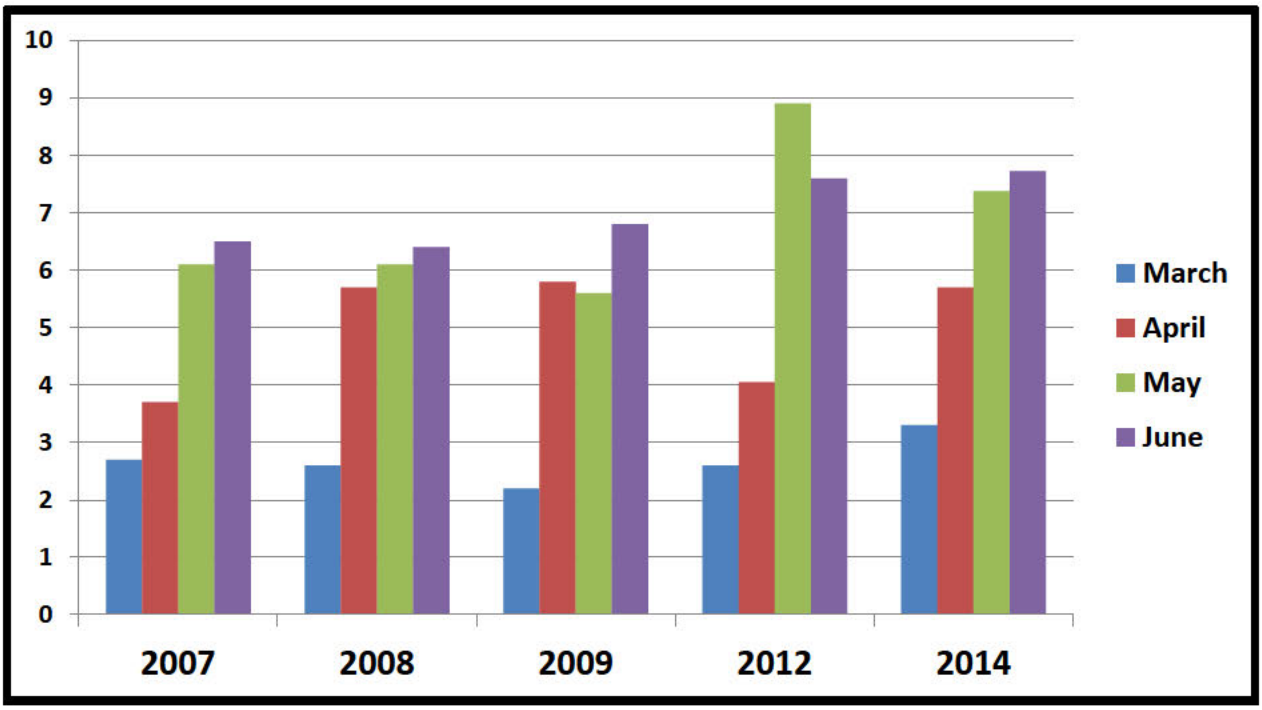

Figure 10-9. Mean species per station.

Equitability quantified through Claude Shannon's equation provides a numerical way of expressing whether species richness is concentrated in a few species or more evenly shared among many species. While graph interpretation is to some degree subjective, equitability among species in 2012 and 2014 was quite similar [Figure 10-10,]. However, equitability in the

early years was more chaotic [Figure 10-10]. Equitability increased from month to month, with March least equitable.

Before leaving species, the trumpeter swan marked as Red-OV8 is shown at Sheep Gulch Pond in early September. This trumpeter swan was detected during 2014 sampling on April 29, May 5, May 29, June 29, and July 6. It was accompanied by another trumpeter swan (no band) on June 29. The second swan was observed on a single day.

An osprey was also recorded sampling at Station 40 while flying upstream over the creek. Ospreys have now been recorded in three Silver Bow subareas including Nissler Pond in Subarea 1 and at least one detection in Subarea 4. The presence of both osprey and belted kingfisher is a good indicator of improved fisheries health. The diet of both of these species is almost exclusively fish.

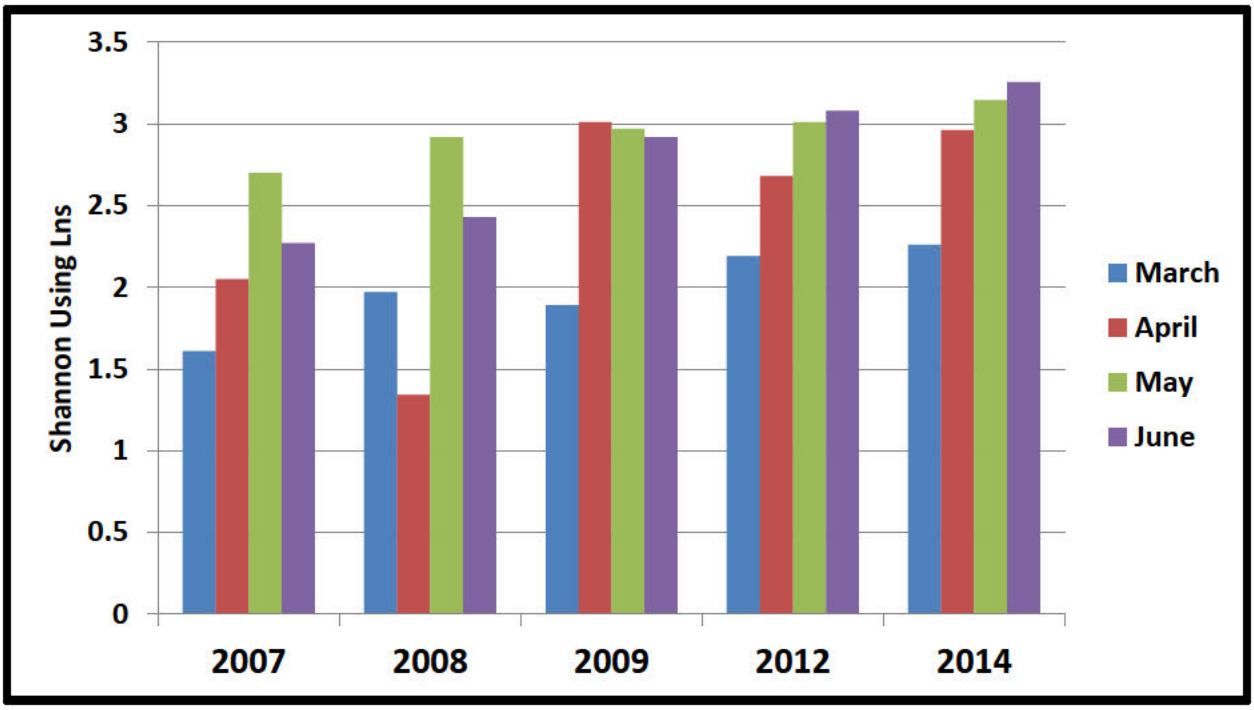

Figure 10-10. Equitability among species, 2007-2014.

Figure 10-11. Trumpeter swan Red-OV8 at Sheep Gulch Pond in September.

Table 10-3. Bird species list, Subarea 2.

Species	Species	Species	Species
American Avocet	Cedar Waxwing	Lincoln's Sparrow	Savannah Sparrow
American Coot	Cinnamon Teal	Mallard	Sharp-shinned Hawk
American Crow	Clark's Nutcracker	Mountain Bluebird	Snow Goose
American Goldfinch	Cliff Swallow	Mourning Dove	Solitary Sandpiper
American Kestrel	Common Goldeneye	Northern Flicker	Song Sparrow
American Pipit	Common Merganser	Northern Harrier	Sora
American Robin	Common Raven	Northern Pintail	Spotted Sandpiper
American Tree Sparrow	Common Yellowthroat	Northern Rough-winged Swallow	Spotted Towhee
American Widgeon	Dark-eyed Junco	Northern Shoveler	Townsend's Solitaire
Bald Eagle	Double-crested Cormorant	Northern Shrike	Tree Swallow
Bank Swallow	Eared Grebe	Osprey	Trumpeter Swan
Barn Swallow	Eastern Kingbird	Pied-billed Grebe	Tundra Swan
Barrow's Goldeneye	Eurasian Collared-Dove	Pine Siskin	Vesper Sparrow
Belted Kingfisher	European Starling	Redhead	Violet-green Swallow
Black-billed Magpie	Forster's Tern	Red-breasted Merganser	Western Grebe
Black-capped Chickadee	Franklin Gull	Red-tailed Hawk	Western Meadowlark
Black-necked Stilt	Gadwall	Red-winged Blackbird	White-crowned Sparrow
Blue-winged teal	Great Blue Heron	Ring-billed Gull	Willet
Bohemian Waxwing	Green-winged Teal	Ring-necked Duck	Willow Flycatcher
Brewer's Blackbird	Hooded Merganser	Rock Pigeon	Wilson's Phalarope
Brewer's Sparrow	Horned Lark	Rock Wren	Wilson's Snipe
Brown-headed Cowbird	House Sparrow	Ross's Goose	Wood Duck
Bufflehead	Killdeer	Rough-legged Hawk	Yellow-headed Blackbird
California Gull	Lazuli Bunting	Ruby-crowned Kinglet	Yellow-rumped Warbler
Canada Goose	Lesser Scaup	Ruddy Duck	Yellow Warbler
Canvasback	Lesser Yellowlegs	Sandhill Crane	

10.3.2 Subarea 4

We are interested in temporal development as well as describing bird use, so Subarea 4 has been sampled as construction progressed over the past five years. In 2014, all reaches became available for bird sampling for the first time. Four new stations were sampled in Reach T in addition to the 16 stations in four reaches previously sampled. Reach P was first sampled in 2010. Reach Q was added in 2011 and Reach R in 2012. Much of Reach S was a kochia jungle when sampled in 2013, and one year later a Rocky Mountain bee plant thicket with kochia

dominated Reach T. More importantly, Reach T has five ponds of varying size available for bird use.

Total number of waterfowl detected at the large ponds in Reach T peaked in late March, when 60 waterfowl comprising five species were counted. Waterfowl use but not necessarily diversity faded through spring with 48 individuals of 11 species in April; 17 individuals of 5 species in May; and 7 waterfowl of 4 species in June. This demonstrates the heavy use by waterfowl during spring migrations.

10.3.2.1 Temporal Bird Use of Reach P

Reach P has been sampled for five consecutive years, remembering that the first two years (2010-2011) had severe spring floods. Late winter bird use increased from the first three years to the most recent two years [Figure 10-12], but it is hard to see a trend in May-June use. As observed for Subarea 2, gross bird use, while sporadic, seems to plateau after just a few years while the annual dynamic plays out. The temporal pattern for species use is similar [Figure 10-13].

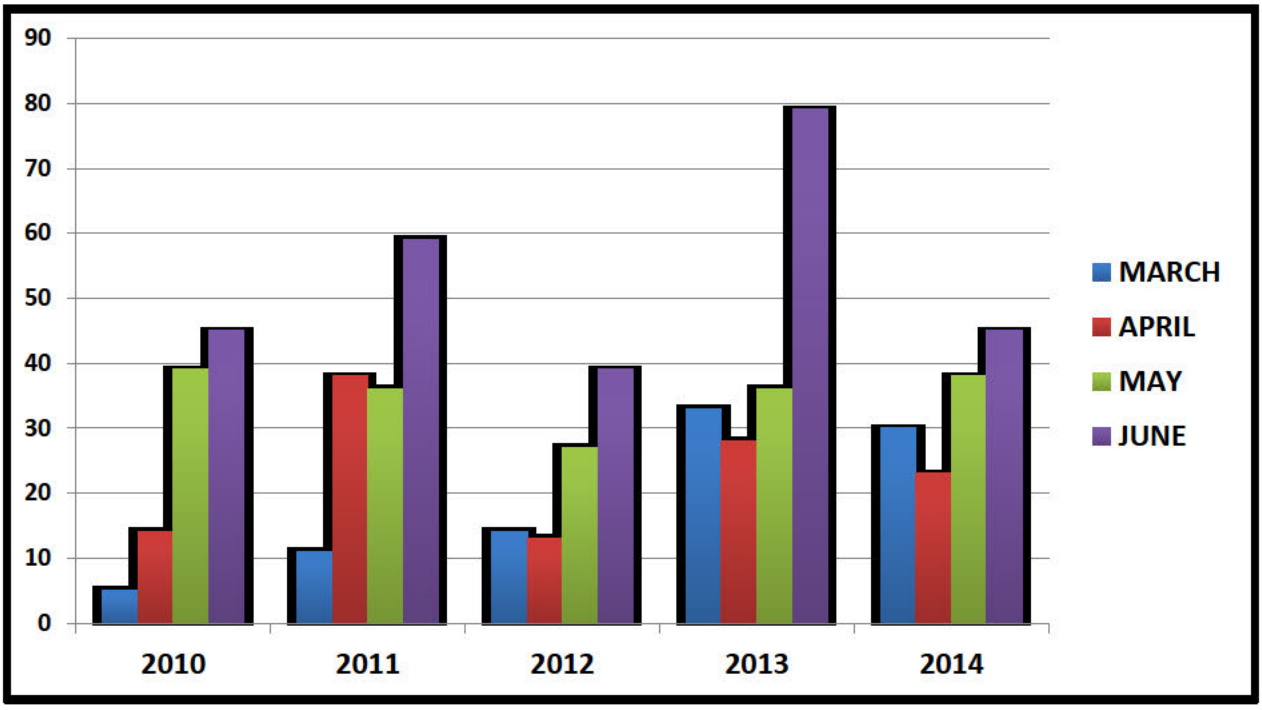

Figure 10-12. Bird census, Reach P.

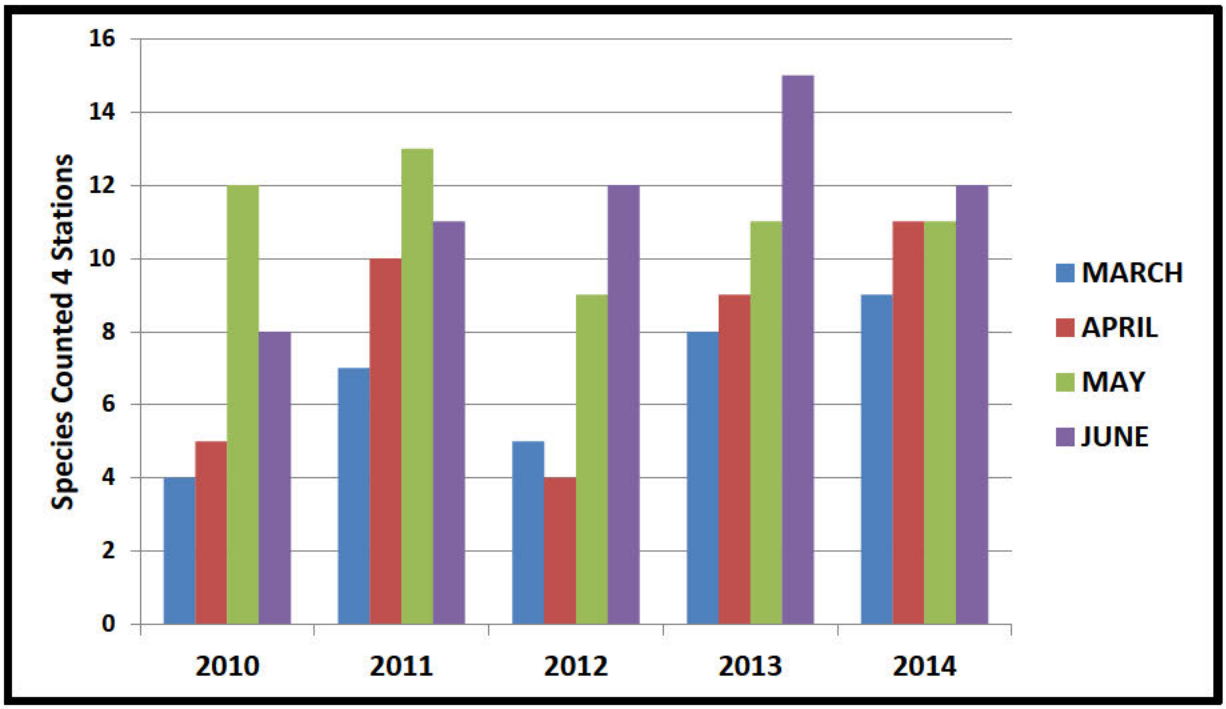

Figure 10-13. Species census, Reach P.

10.3.2.2 Bird Abundance and Equitability

Considering gross birds counted in Reaches P and S collectively, the only clear trend is the universal one; more use in spring than late winter [Figure 10-14]. Waterfowl dominates bird use in March, to be joined in May by many cliff swallows and fewer savannah sparrows, spotted sandpipers, Wilson phalarope, and yellow-headed blackbirds. In June, bank swallows became more common but the species listed for May continued to use the first four reaches of Subarea 4.

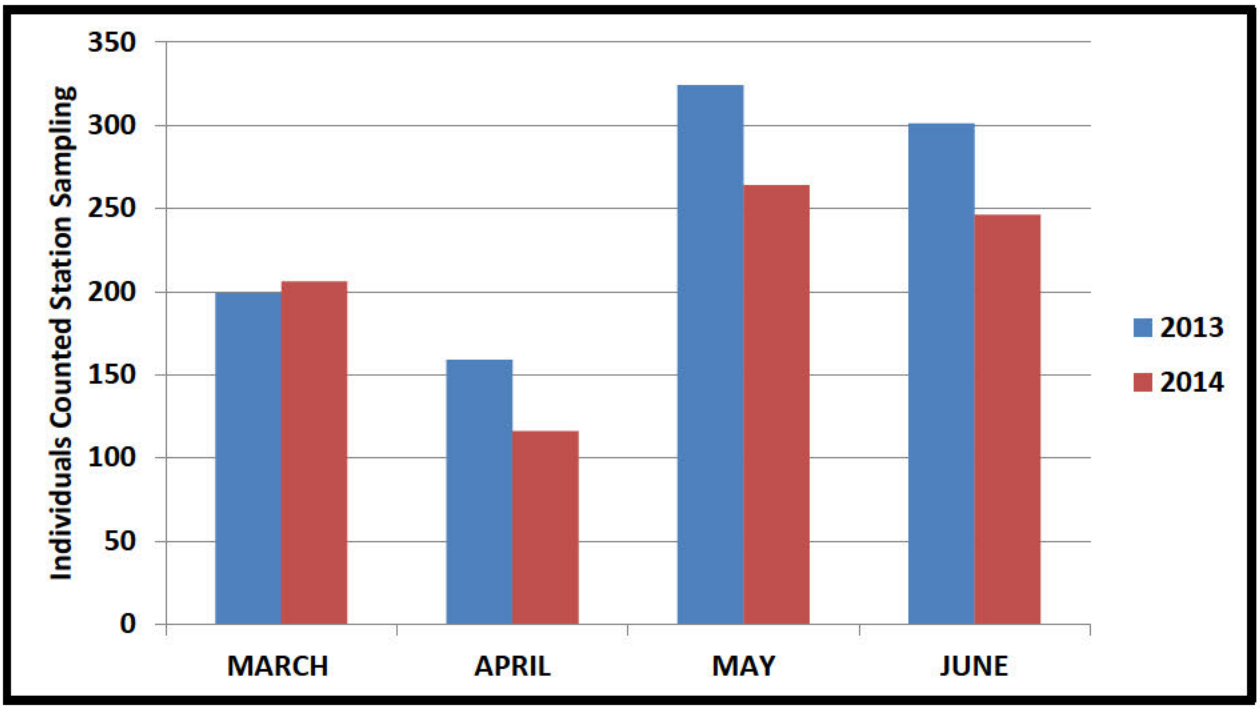

Figure 10-14. Bird census, Reaches P-S.

Taking a more comprehensive view of Subarea 4, Figure 10-15 through Figure 10-20 portray bird use in Subarea 4. The first full bird census of Subarea 4 [Figure 10-15] differs from other subareas in that bird use peaked in March, the result most likely of pond use by migrating waterfowl. The March count included 117 mallards, 50 Canada geese, 44 widgeon, and 37 ring-billed gulls.

10.3.2.3 Species

Species richness for Reaches P and S [Figure 10-16] shows general increase for the first two years of sampling the upper four reaches of Subarea 4, but only April is likely significant. In contrast, species use expressed as the mean number of species observed per station [Figure 10-17] increased markedly from the first to second year throughout the sample months.

Of the five "new" species added to the list for Subarea 4 in April, four were detected in Reach T. Reach T with its ponds will likely have a big influence on bird use in Subarea 4, just as the "horseshoe wetland" in southern Reach S is a hotspot for bird use.

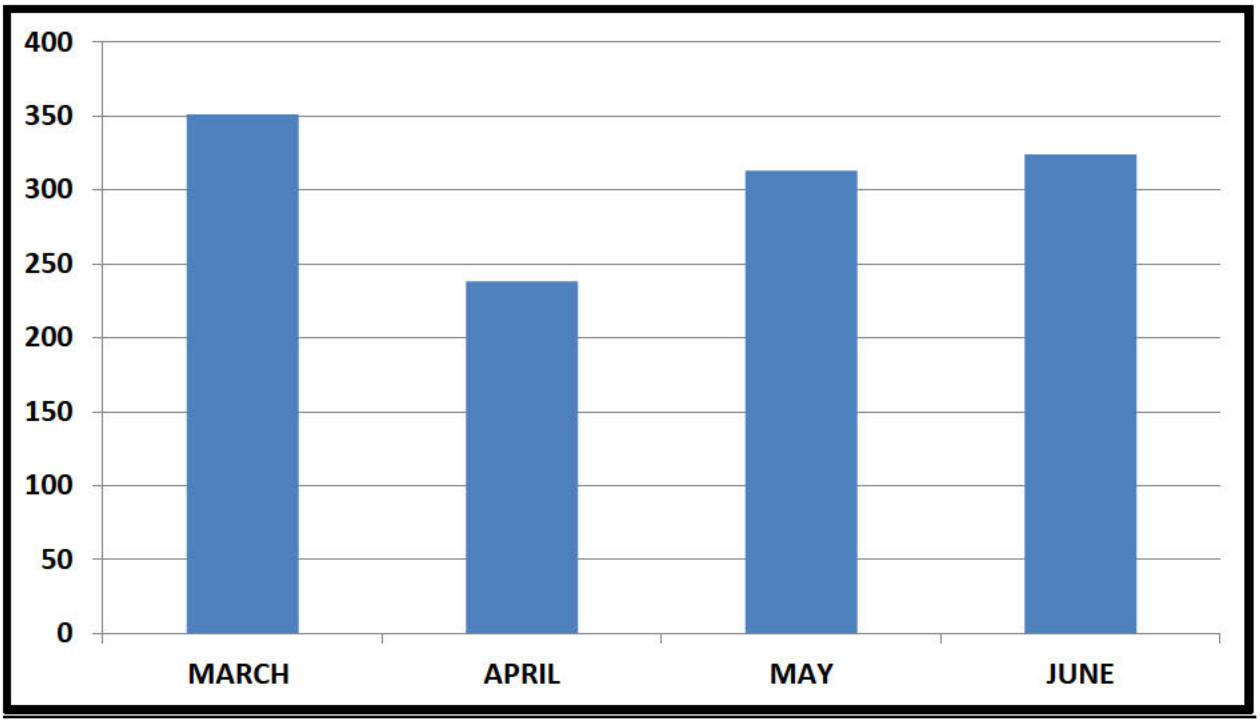

Figure 10-15. Bird census, Subarea 4.

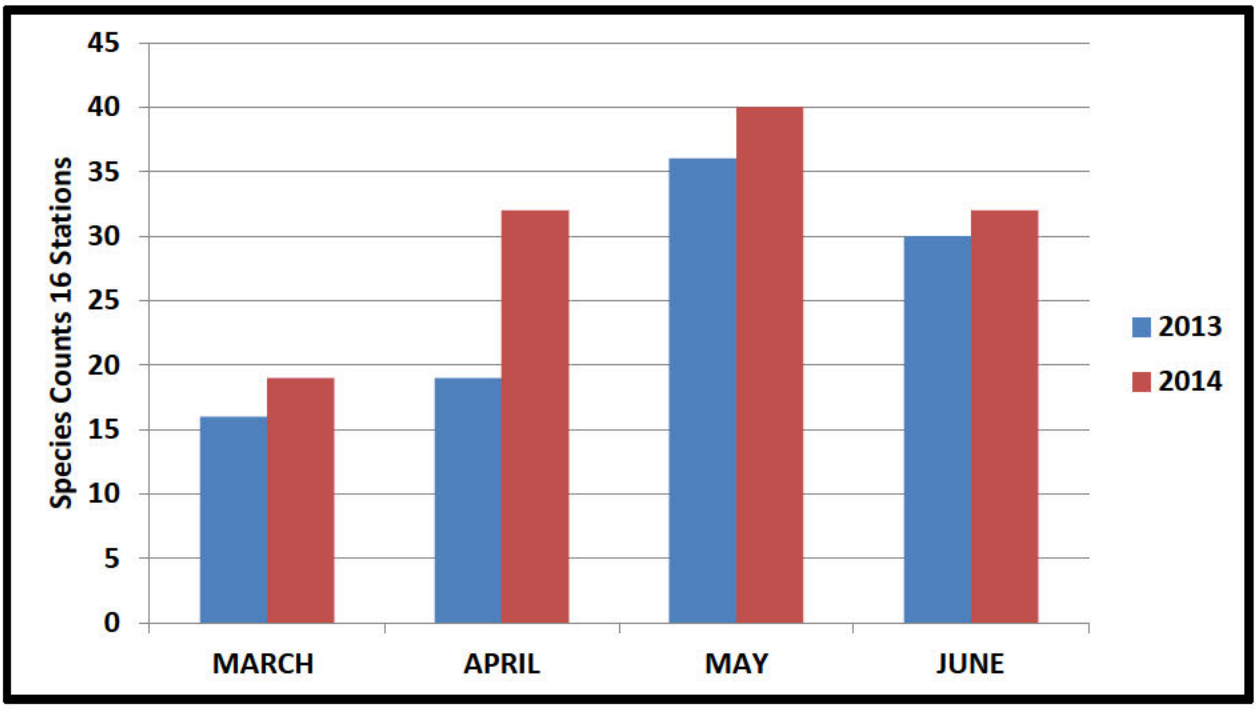

Figure 10-16. Species richness, Reaches P-S.

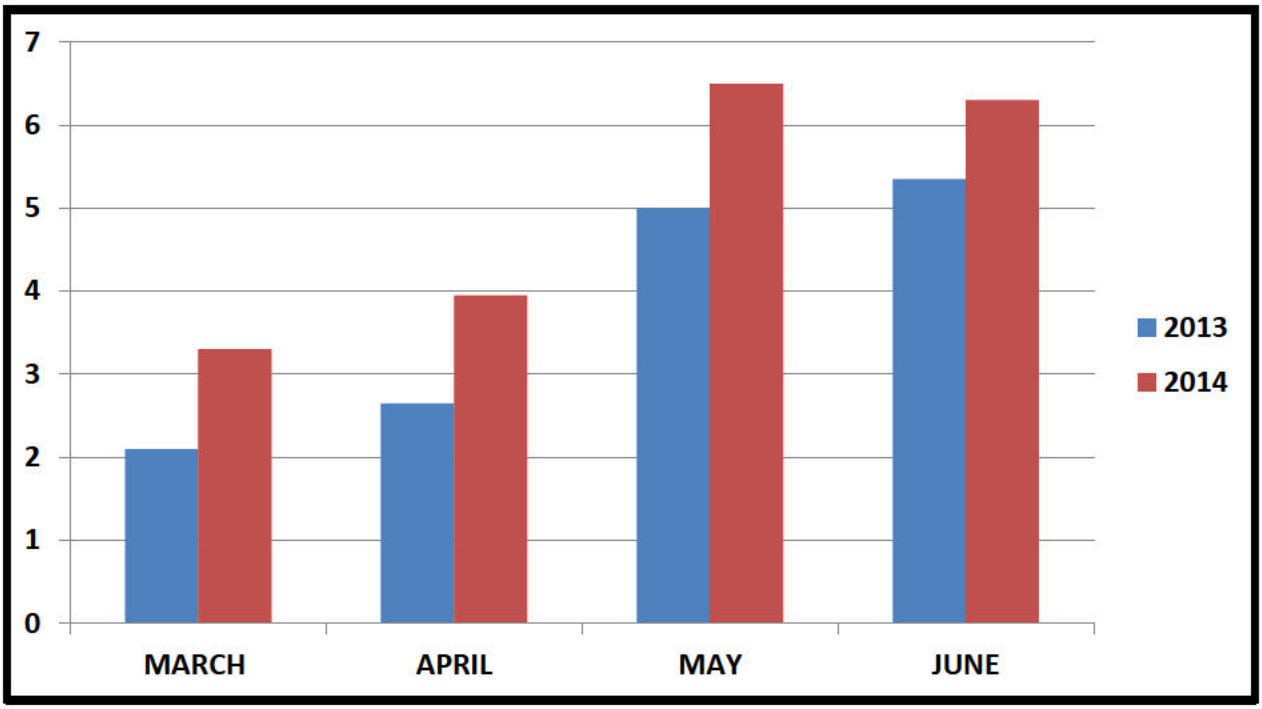

Figure 10-17. Mean species per station, Reaches P and S, .

The inclusion of Subarea 2 in Figure 10-18 provides a basis for comparison because between-year comparisons are not yet possible within Subarea 4. Despite the concentrated bird use in March, and while Subarea 4 species equitability is lower in all months, it is only in June that species equitability is much lower in Subarea 4.

We conclude by considering the species lists in Subarea 2 and Subarea 4. Simple counts are one of the best indices of change attributable to vegetational development with time. A total of 77 species have been recorded in Subarea 4 compared to 107 in Subarea 2. Despite being older, Subarea 2 added species at a faster rate in 2014 than did Subarea 4. We can look forward to considerably more bird diversity in Subarea 4 as habitats recognized by birds increase. While the ponds are huge habitat factors, the prevalence of uplands in Subarea 4 may limit habitat specialization compared to Subarea 2 for example.

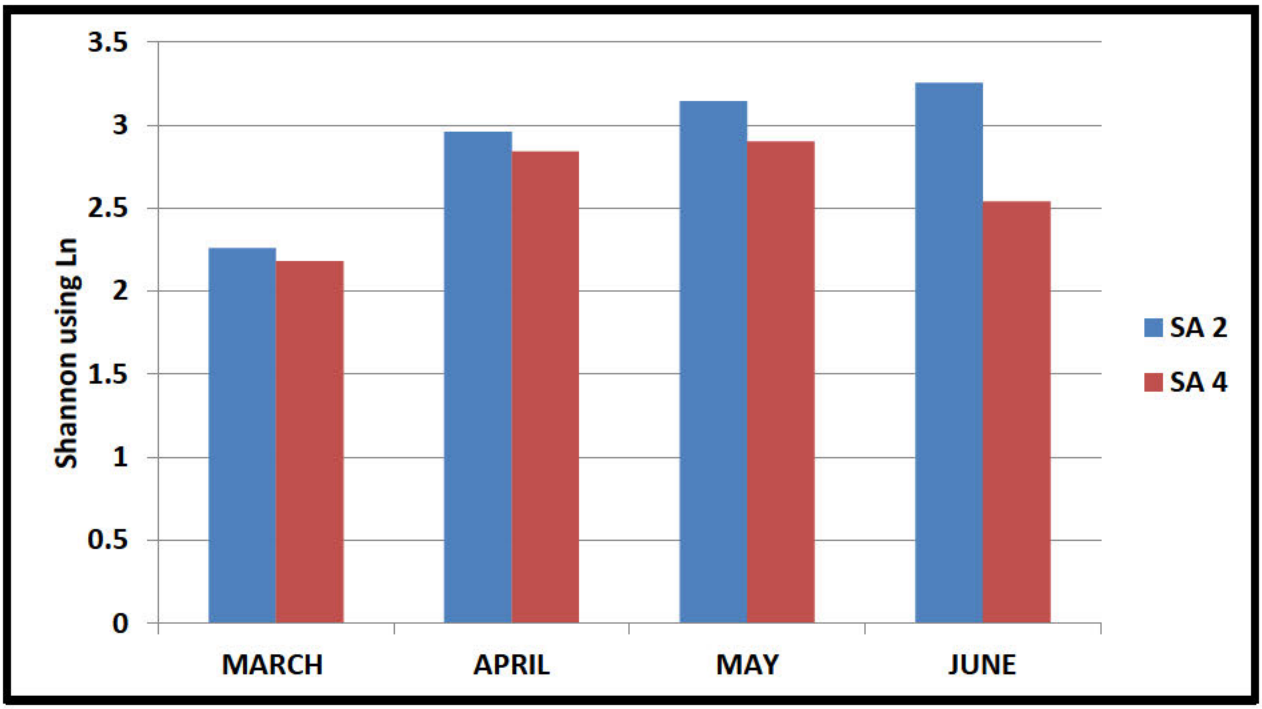

Figure 10-18. Species equitability in Subarea 2 and Subarea 4, 2014.

10.3.2.4 Stations Key for Habitat Differences

Station equitability [Figure 10-19] is similar to Subarea 2, which also has concentrated bird use of ponds. More revealing is Figure 10-20, which shows enhanced use of ponds as compared to the stream. The big spikes at the horseshoe wetland in southeast Reach S (site 73) and at the first and third stations in Reach T (site 77 and site 79) reflect the importance of water and wetlands to bird use [Figure 10-20]. The horseshoe wetland was created in 2005 when borrow for a haul road was excavated, so it is considerably older than the rest of Subarea 4. Flooding from 2010-2012 has diminished it floristically and vegetationally, but a wetland it remains and as such it has more bird use than uplands. Thus, Reach S contains an important wetland habitat that sometimes exhibits open water.

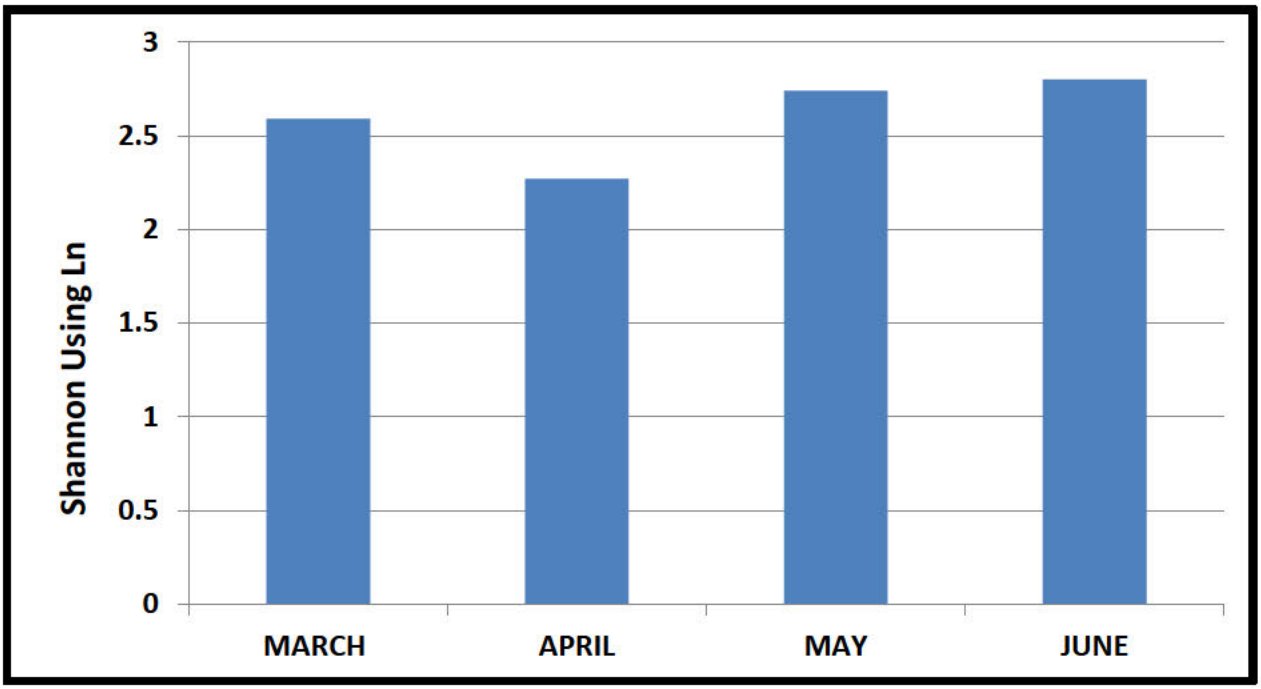

Figure 10-19. Station equitability.

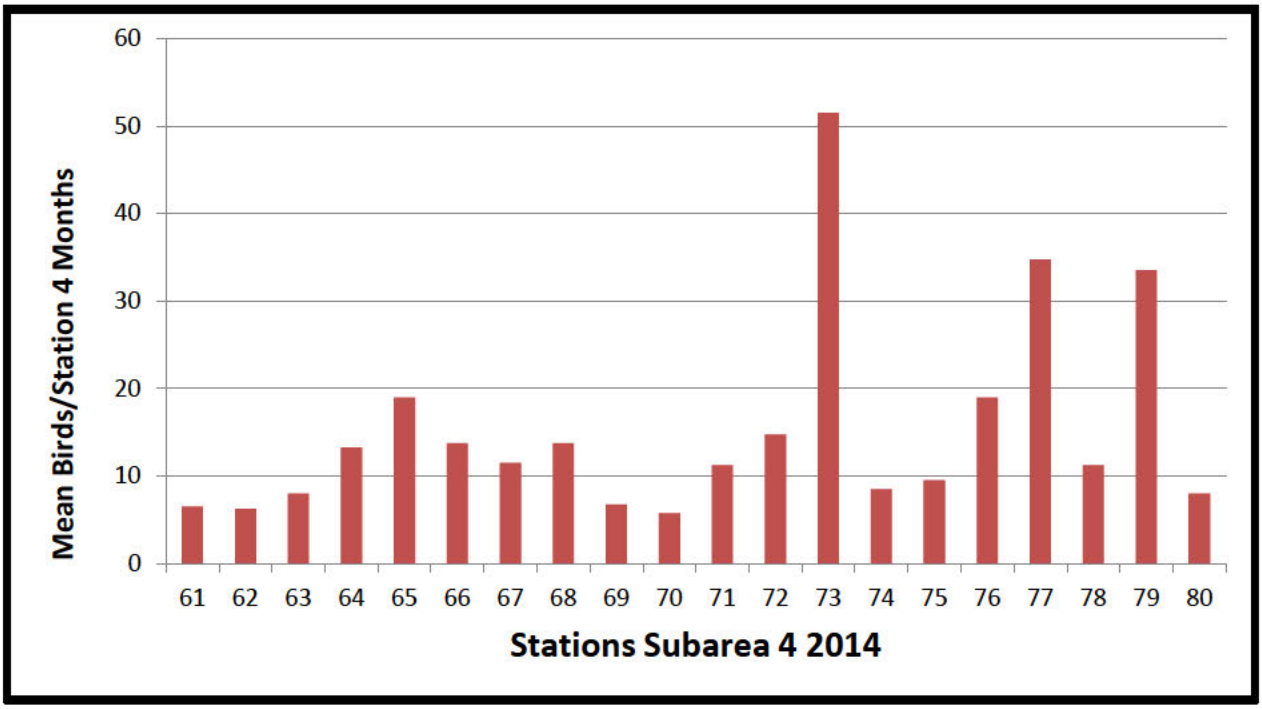

Figure 10-20. Mean birds observed per station.

Table 10-4. Bird species list, Subarea 4.

Species	Species	Species	Species
American Avocet	Canada Goose	Hooded Merganser	Rock Pigeon
American Coot	Cinnamon Teal	Horned Lark	Ruddy Duck
American Crow	Clay-colored Sparrow	House Finch	Sandhill Crane
American Goldfinch	Cliff Swallow	Killdeer	Savannah Sparrow
American Kestrel	Common Goldeneye	Lesser Scaup	Song Sparrow
American Pipit	Common Merganser	Lincoln's Sparrow	Spotted Sandpiper
American Tree Sparrow	Common Raven	Long-billed Curlew	Tree Swallow
American Widgeon	Common Yellowthroat	Mallard	Turkey Vulture
Bald Eagle	Cooper's Hawk	Merlin	Vesper Sparrow
Bank Swallow	Double-crested Cormorant	Mourning Dove	Western Meadowlark
Barn Swallow	Eared Grebe	Northern Flicker	Wilson's Phalarope
Barrow's Goldeneye	Eastern Kingbird	Northern Harrier	Wilson's Snipe
Belted Kingfisher	European Starling	Northern Pintail	Yellow Warbler
Black-billed Magpie	Franklin's Gull	Northern Rough-winged Swallow	Yellow-headed Blackbird
Blue-winged Teal	Gadwall	Northern Shoveler	Yellow-rumped Warbler
Bobolink	Golden Eagle	Osprey	
Brewer's Blackbird	Gray Partridge	Prairie Falcon	
Brewer's Sparrow	Great Blue Heron	Red-tailed Hawk	
Brown-headed Cowbird	Greater Yellowlegs	Red-winged Blackbird	
California Gull	Green-winged Teal	Ring-billed Gull	

11.0 SMALL MAMMALS[44]

11.1 INTRODUCTION

This report focuses on 2014 small mammal trapping results in some major riparian habitat types following remediation. Habitat distinctions are physiognomic. This year, trapping was conducted in Reaches C, E, H, P, and R.

Birds are among the most mobile organisms, and while bird use is tied to habitat, those habitat requirements change temporally. In contrast, small mammals have restricted home ranges, and their habitat requirements vary less seasonally, but their population dynamic can be pronounced. Beginning in 2012, in revegetation of different physiognomic types and various ages, Bighorn Environmental Sciences began monitoring small mammals along Silver Bow Creek to complement bird monitoring.

Waste removal and remediation of mine waste in the Streamside Tailings Operable Unit (SSTOU) destroyed some wildlife habitats, but revegetation provided more and healthier new habitats. By virtue of quantity of habitat alone, the net gain for wildlife has been huge. This year, meadow vole populations erupted, so captures were far higher than in 2013.

11.2 METHODS

Methods generally follow the Montana Fish, Wildlife, and Parks (MFWP) Diversity Monitoring Project - Small Mammal Trap-Line Protocol with some changes. Methods are next described.

11.2.1 Identifying Important Habitats

Important types of habitat must first be distinguished. For birds and to varying degrees other wildlife, physiognomic vegetation types are the basis for wildlife habitat distinctions in the Silver Bow Creek riparian zones. In physiognomy, the emphasis rests on the appearance of vegetation regardless of its floristic composition; it refers to the overall appearance of a phytocenose. Introduced legumes, such as alfalfa in uplands and bird's foot trefoil in moist habitats play a big role in revegetation by increasing nitrogen fixation rates and productivity, and play a big role in small animal habitat by providing security and thermal cover. Some vegetationally defined habitats therefore incorporate legumes into their names.

[44] Chapter 11 was prepared by Rich Prodgers of Bighorn Environmental Sciences (Dillon, Montana) with minor editing and formatting by RESPEC.

Table 11-1. Important habitat types for the Streamside Tailings Operable Unit (SSTOU) as recognized by Bighorn Environmental Sciences.

Habitat type	Description
Tall shrub	The visual aspect is dominated by shrubs >2 m tall, also called woodland. Sampled twice this year. Woodland is an important physiognomic type for wildlife along the SSTOU, although others have greater acreage. Most often, it occurs along streambanks [Figure 11-1]. Two phases may be distinguished based on shrub density. The dense phase is difficult to walk through, almost impenetrable, and visibility is restricted to a few meters. Two communities of this type were sampled in 2013. Due to shading, the understory may be depauperate, depending also on soil moisture regime. The less common open phase has <35% tall shrub canopy coverage [Daubenmire, 1959] and a well-developed understory of herbs with perhaps some shorter shrubs.
Short shrub	The short-shrub or scrub type is also nanophanerophytes in Raunkiaer's life-form scheme. In the SSTOU, scrub is rare or absent and wasn't sampled this year. The more common rabbitbrush or grass type is shrub-steppe, which has elements of grassland with a shrub overstory.
Meadow	Meadow refers to forb-rich (usually) grasslands in moist habitats. In the SSTOU, this type occurs mainly in the hydrologically defined transition zone as well as the drier wetlands and wetter parts of the subirrigated zone. In revegetation, the forbs are usually legumes. This year, I sampled tall-grass (basin wildrye) meadow in Reach E.
Steppe	Steppe is the name for a drier (semi-arid) grassland, the grasses mostly having narrow blades. Trees and shrubs are few. Steppe was sampled in Reach R for the second year. If alfalfa is dominant or co-dominant with grasses, it's alfalfa-steppe. I sampled alfalfa-steppe in 2014 in lower Reach P.
Shrub-steppe	In shrub-steppe, a layer of shrubs overtops the grasses. At the Reach G and H boundary, shrub-steppe featuring rabbitbrush was sampled for the second year. If alfalfa is abundant, it's alfalfa-shrub-steppe.

Figure 11-1. Dense-tall-shrub woodland sampled in Reach C, 2014. Silver Bow Creek is just left of willows.

Vegetation is an important element of small mammal and bird habitat, but not the only factor affecting rodent populations. For example, a single power pole in a meadow is a likely hawk-owl perch, depressing small mammal populations locally. Domestic cats near ranch buildings can do the same thing, as can other predators. In addition, small mammal populations fluctuate temporally, sometimes periodically, for reasons imperfectly understood. This happened this year. It is one reason that sampling must be replicated temporally both to characterize use at a larger (than one year) temporal scale and detect trends.

11.2.2 Trapping Protocol

The habitats sampled in September 2014 are shown in Figure 11-1, Figure 11-2, Figure 11-3, Figure 11-4, Figure 11-5, and Figure 11-6. Trapping begins with a linear 100-m transect, in practice a 100-m measuring tape. Usually it is straight, but a "dog-leg" configuration sometimes is necessary to keep the transect within the designated habitat, as at the alfalfa-steppe transect in Reach P, where creek sinuosity required a "dog-leg" transect. Endpoints were marked by GPS for relocation and mapping. Long transects confer a great advantage over short transects in that local habitat anomalies are blended into the characteristics of larger habitat characteristics.

One exception to the trapping protocol occurred. The dense tall-shrub habitat in Reach C was sampled by placing traps along the edge of the willows, just within or outside the stems. This is

an "edge" rather than woodland *per se*. The strip of tall shrubs made it impractical to run a tape through them and also to service traps, especially those dragged by captives. Moreover, the strip of willows along the creek is just a few m wide.

A pin flag was placed every 10 m from the start; 10 locations in all. The origin was not sampled because it tends to be disturbed by sampling activity. Each line was sampled two consecutive nights and checked each morning.

The center of each sample station was the live trap. Snap traps were then placed in the four cardinal directions approximately two m from the central trap. There were five traps in all, 50 traps per night, and 100 trap-nights per habitat (minus any traps tripped without capture).

In dense vegetation, traps were placed in small natural openings, if available. They must be on a rather firm substrate to function properly. At Stations 2 and 9, one rat (snap) trap replaced one of the smaller mouse traps. The intent of the rat trap (from the MFWP protocol) probably is to catch larger rodents such as the packrat, also called the bushy-tailed wood rat. However, I know from experience that a robust boar packrat can shrug off a standard rat snap trap. In practice, no packrats have been caught yet, although this year one deer mouse and one vole were captured in rat traps.

MFWP used Wood stream Museum Specials as well as Victor snap traps, but we stuck with Victors. My personal experience is that the Specials are too sensitive for this type of riparian sampling, for example tripping from wind or grasshoppers. Drickamer and Mikesic [1993] found from three years of trapping that Victor traps kill mice more frequently and effectively than Museum Specials, especially smaller mice, from which one might extrapolate that the Victors are better for shrews too.

Traps were baited in the evenings with rolled oats and a mix of peanut butter and paraffin. The wax helps prevents rodents from licking off the bait without tripping the trigger. But if too hard, it won't adhere to the trip-plate, so an heuristic approach to blending the constituents is required. On the Clark Fork, Prodgers [2013d] took some rodent measurements as prescribed by MFWP, but these data were never used and showed considerable range in dimensions, so specimen measurements are not taken on the SSTOU. All shrew specimens were preserved frozen and submitted to Paul Hendricks, retired zoologist with the Montana Natural Heritage Program. We are indebted to Paul for his identifications. On the SSTOU, Paul has identified three species of shrew, but only two species were captured in 2014. Meadow voles were the only representative of the *Microtus* genus this year, but there were lots of them.

The main deviations from the MFWP protocol follow:

- The big change is that the pitfalls were discarded because sampling along the Clark Fork River revealed that all but shrews escape them, and constructing them requires additional tools, materials, and labor. Shrews are frequently caught in snap traps, so they replaced pitfalls. The modified setup was to place the live trap near the pin flag and snap traps in a cross pattern for a total of 50 traps per line.
- Each habitat was sampled just two nights. This is the standard sampling protocol on the SSTOU.
- Data were recorded by trapline, not by individual trap location. The idea is to extrapolate to the larger universe of habitats, not to reduce focus to individual trap stations.

- Specimen measurements of feet, ears, and weight were curtailed. All we learned from taking these measurements in 2012 on the Clark Fork River Operable Unit (CFROU) is that there is a lot of variance associated with each measurement relating to age, health, whether pregnant or not, a.
- Only shrew specimens were preserved for professional identification.
- At the Reach C dense tall shrub habitat, the transect was run along the outer edge of bank willows. Crawling through the narrow strip of nearly impenetrable willows would have been too much, and snap traps are often lost there if dragged away as they sometimes are.
- All snap traps were Victors.

11.2.3 Data Analysis

Analysis is straightforward. Capture success is the proportion of captures to trap nights minus failed traps. Failed traps are those tripped without capture, or occasionally, a station is missed when setting traps. Capture success may be stratified by small mammal species or trap type.

Species richness has so far been low. For example, no yellow-pine chipmunks, western jumping mice, or bushy-tailed woodrats have been captured. If diversity increases, investigating species abundance relations may be interesting.

11.3 RESULTS

Results are organized by the identified habitat types with secondary focus on species and type of trap. The species trapped are presented in Table 11-2.

Table 11-2. Species trapped in the Streamside Tailings Operable Unit, 2014.

Species	Description
American deer mouse	*Peromyscus maniculatis* was the most prevalent capture in 2013. Probably in average years, but in 2014, vole captures outnumbered them almost 2:1. Very widely distributed with woodland and desert varieties. "Woodland forms climb well and are semi-arboreal." That's our guys; they can scamper several m up a willow quickly. Host to hantavirus.
Masked shrew	*Sorex cinereus* is less frequently encountered, so far, than *S. vagrans*. Very widely distributed across Canada and the northern states, including Alaska. Eats small invertebrates, insects, larvae, small mice, carrion, and in winter, some plants. Most common in moist habitats. A poor jumper.
Meadow vole	*Microtus pennsylvanicus* is widely distributed across Canada and the northern tier of states. Good swimmer and biter but not a climber. Makes runways in grass and often clips grass to reach seeds. Prolific and populations are cyclic; eruption this year.
Vagrant shrew	*Sorex vagrans*, the epithetic derivation is obvious; *L. vagus* = wandering, roaming. Found chiefly west of us (western Montana, Idaho, Oregon, Washington, and British Columbia). Distinguished from the masked shrew by a slightly longer tail and one feature of dentition. Active on the soil surface and using vole runways. Eats larvae, slugs, worms, spiders, etc. This species was more prevalent than the masked shrew in 2013 and 2014.
Water shrew	*Sorex palustris*, the epithetic derivation again is obvious; *L. palus* = a marsh or swamp. May construct middens along streambanks. Droppings are often full of remains of invertebrate exoskeletons. Found from south of Montana up through the Alaska panhandle and from Hudson Bay up through Great Slave Lake and beyond. Not trapped this year.

11.3.1 Habitat Preferences

Woodland.-The dense tall willows along the creek in Reach C had an overall capture rate of 46% compared to 7% in Reach A last year. Thirty seven voles and four shrews were caught in all trap types. I was especially surprised at the lack of deer mice, which are facultatively arboreal and early colonizers of revegetation. In Reach H, where this type has a more open canopy and much more developed herbaceous layer, results were very similar. It is gratifying that similar habitats would provide roughly equal results. The overall capture rate was 42%; 35 voles and one shrew. Not one deer mouse at either site! Last year, the overall capture rate here was only 2%.

Open Phase of Woodland.-The open phase of woodland was not sampled in 2014, although part of the 100-m transect in Figure 11-2 could with equal justification be called open.

Alfalfa-Meadow.-This type was not sampled in 2014.

Alfalfa-Steppe.-This type was sampled on a new transect just north of Fairmont Road in Reach P [Figure 11-3]. The alfalfa here is less thick than in the alfalfa-meadow in northern Reach P (sampled last year). Compared to alfalfa-steppe, (sampled in 2013) east of the Burlington Northern line in Reach P, the main habitat difference is that the transect sampled this year is close to the creek.

The first night, 21 deer mice and two voles fell to the Victors. The following night, hunger tempted six deer mice and nine voles to their death. Combining results, the capture rate was 34% for deer mice and 11% for meadow voles. No shrews were captured in this alfalfa-steppe.

Figure 11-2. In 2013, this good-looking habitat in Reach H produced just two meadow voles in 85 trap nights. In 2014, 35 meadow voles and one shrew (*Sorex vagrans*) were captured in the same number of trap nights.

Figure 11-3. Alfalfa-steppe habitat in southern Reach P produced 34 deer mice and 11 meadow voles in 83 trap nights.

Alfalfa-Shrub Steppe.-Alfalfa-shrub steppe in the form of rabbitbrush or alfalfa grasses was sampled south of Sheep Gulch Pond in Reach G. It was seeded in spring 2006. The vegetation is mainly alfalfa with rubber rabbitbrush and sheep fescue subdominant in cover, but visually, rabbitbrush dominates [Figure 11-4]. This transect is about 30 m from unremediated vegetation, so colonization is not limiting. It is also not far from Sheep Gulch Pond, a very different habitat. Last year, I caught a single deer mouse in 94 trap nights. This year, captures were equally divided among deer mice and meadow voles with a single shrew (*S. cinereus*). Nine deer mice, nine meadow voles, and one shrew (*S. cinereus*) succumbed to snap and live traps in 84 trap nights. The overall capture rate was 23%.

Meadow.-The dense giant bunchgrass in Reach E, so thick that finding traps was a chore, was inferior to most other habitats this year in terms of rodent use. I expected great things from the very thick cover in the meadow type [Figure 11-5], but deer mice were absent and the meadow-vole capture percentage was 19%. Two shrews (one *Sorex cinereus* and one *S. vagrans*) were captured in snap traps.

Steppe.-The final type, located in Reach R, is recent steppe revegetation, which last year was classed kochia-steppe [Figure 11-6]. I didn't photograph it this year, but kochia auto-suppressed. In 2013, the overall capture rate was 19% with snap traps catching 15 of 16 deer mice. This year, the overall capture rate was 29%; all but two of them deer mice.

11.3.2 Trap Preferences

Trap results are on a percentage basis. Since they comprise three-quarters of all traps, snap mouse traps account for the majority of captures, but sometimes live traps rivaled them on a percentage basis.

Woodland.-At the streamside habitat in Reach C, the capture rate for snap traps was 33%, live traps 35%, and rat traps 25%. At the Reach H site, capture rates were 51% for snap traps, 13% for live traps, and no captures in rat traps.

Alfalfa-Steppe.-The snap trap capture rate was 50% with another 41% for live traps. Nothing managed to get caught in the rat traps, although one was tripped. Cumulative capture rate was 39%.

Alfalfa-Shrub Steppe.-Deer mice, shrews, and meadow voles were taken. Snap mouse traps had a capture rate of 25%, which beat live traps at 18%. The rat trap went un-tripped.

Figure 11-4. Vegetation Transect 70b is also the alfalfa-shrub steppe mouse transect, Reach G.

Meadow.-The capture rate for voles and shrews was 30% for snap traps and 11% for live traps with rat traps playing no role.

Steppe.-Last year, trapping success was second only to alfalfa-meadow. The vole eruption changed that picture, but the number of deer mice capture actually increased from 16 to 23. Overall success was 28% with live traps a bit more efficient than snap traps and a single deer-mouse capture in a rat trap.

11.4 SUMMARY AND DISCUSSION

Last year, I posed the question, 'is SSTOU revegetation poor small-mammal habitat, or were populations depressed in 2013?' With just two years of sampling, we cannot answer that question except to say that the differences between just two years has been huge. Some capture rates approached 50 this year whereas some approached 0 last year.

Figure 11-5. Meadow habitat in the form of basin wildrye, Reach E. Thick cover provides security and thermal protection. Black lab is barely visible 10 m away.

Figure 11-6. Photo was taken last year, when the vegetation in Reach R was equal parts kochia and native grasses. This year, it's more open steppe with little kochia.

Small-mammal attributes as they relate to the identified habitats are summarized in Figure 11-7. Last year, I said that the oldest and most structurally developed types (woodland) had relative few captures. That was completely reversed in 2014 with a capture rate exceeding 40%. Only alfalfa-steppe, which was sampled streamside, equaled woodland small-mammal activity [Table 11-3].

The remaining three habitat types (steppe, meadow, and shrub-steppe) likewise shared similar capture rates, although well down from the three discussed in the previous paragraph. Only steppe had a comparable, albeit lower, capture rate in 2013. The others two were much lower in 2013. Species composition varied among the three types [Figure 11-7].

Only future sampling will elaborate small mammal habitat use including the temporal dynamic. We need to resample some of the 2013 transects while also sampling some new ones in 2014.

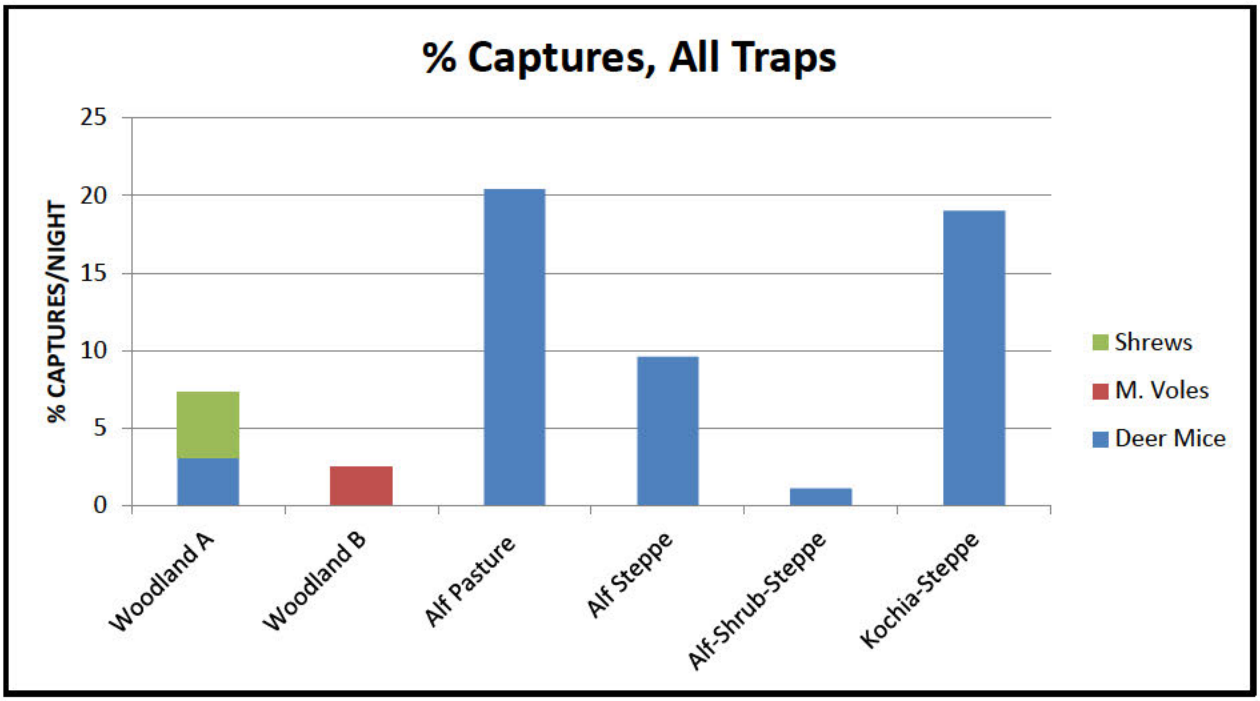

Figure 11-7. Comparative captures for live and snap traps discounted for failed traps.

Table 11-3. Small mammal summary for habitat types; all based on two nights of trapping. (Capture rate based on 100 traps minus any tripped traps.)

Type	Captures per line (per night)		Main Species
	2013	2014	
Woodland A or C	5	46	Deer mice, masked shrews
Woodland H	5	42	Deer mice, masked shrews
Meadow	na	24	Meadow voles, shrews
Alf-Shrub-Steppe	1	23	Deer mice, masked shrews
Alfalfa-Steppe	5	47	Deer mice, meadow voles
Steppe	19	29	Deer mice
Mean	7	35	

12.0 CONCLUSIONS

This chapter concludes the 2014 monitoring report and provides an evaluation of monitored conditions in relation to performance standards specified in the SSTOU ROD [MDEQ and USEPA, 1995]. Numeric performance standards are specified in the ROD for surface water and groundwater COC concentrations [MDEQ and USEPA, 1995] and therefore this chapter focuses on those media. While more stringent standards promulgated since the issuance of the ROD have not yet been formally adopted as performance standards for this operable unit, this monitoring report uses the more stringent of the ROD's Circular WQB-7 [MDHES, 1994] standards or current Circular DEQ-7 [MDEQ, 2012a] standards as the goal to be attained for purposes of evaluation.

For surface water and groundwater, sample concentrations from this monitoring year are compared to performance goals at each SSTOU monitoring site. Surface water sites outside the SSTOU (SS-01, SS-05A, SS-06G, and SS-15G; Figure 1-2) are not included. A summary of performance goal exceedances is provided in Table 12-1 (surface water), Table 12-2 (groundwater in the vicinity of the Mine Waste Relocation Repository), and Table 12-3 (groundwater in the SSTOU floodplain). In addition, this chapter provides a brief comparison of COC concentrations between surface water sites and in groundwater clusters to identify potential remaining COC sources.

The remedial actions in the SSTOU are largely complete although some work remains to be completed [Figure 12-1]. These data will guide managers in identifying progress or problems in the recovery of the operable unit following implementation of the remedial actions.

Table 12-1. Attainment of surface water performance goals for contaminants of concern at sampling sites in the Streamside Tailings Operable Unit (SSTOU), 2014. Sites within the watershed but outside the SSTOU are not included.

Site ID	Site Location	Contaminant of Concern[45]					
		As	Cd	Cu	Pb	Hg	Zn
SS-07	Silver Bow Creek below WWTP						
SS-08	Silver Bow Creek at Rocker						
SS-10A	Silver Bow Creek above Sand Creek						
SS-10B	Silver Bow Creek below Sand Creek						
SS-11C	Silver Bow Creek above Browns Gulch						
SS-11D	Silver Bow Creek below Browns Gulch						
SS-13	Silver Bow Creek in Reach L						
SS-14	Silver Bow Creek at Miles Crossing						
SS-15A	Silver Bow Creek above German Gulch						
SS-15B	Silver Bow Creek below German Gulch						
SS-16	Silver Bow Creek in Reach P near Fairmont						
SS-17D	Silver Bow Creek below Stewart Street at Opportunity						
SS-19	Silver Bow Creek at Frontage Road						

Attainment of performance goal during all quarterly monitoring periods.

Failure to attain the performance goal during one to three quarterly monitoring periods.

Failure to attain the performance goal during all quarterly monitoring periods.

[45]Abbreviations: As = arsenic, Cd = cadmium, Cu = copper, Pb = lead, Hg = mercury, and Zn = zinc.

Table 12-2. Attainment of groundwater performance goals for contaminants of concern in monitoring wells of the Mine Waste Relocation Repository in the Streamside Tailings Operable Unit, 2014.

Site	Arsenic	Cadmium	Copper	Lead	Mercury	Zinc
1GW-1056						
LYP-07						
MW-2B						
MW-2C						
MW-2D						

	Attainment of performance goal during both monitoring periods.
	Failure to attain the performance goal during one monitoring period.
	Failure to attain the performance goal during both monitoring periods.

Table 12-3. Attainment of groundwater performance goals for contaminants of concern in floodplain monitoring wells located along Silver Bow Creek in the Streamside Tailings Operable Unit, September 2014.

Cluster	Arsenic	Cadmium	Copper	Lead	Mercury	Zinc
Colorado Tailings						
Rocker						
Nissler						
Silver Bow						
Miles Crossing						
Fairmont						
Crackerville						
Stuart						
Frontage Road						

	Attainment of performance goal.
	Failure to attain the performance goal in one monitoring well sample.
	Failure to attain the performance goal in both monitoring well samples.

Figure 12-1. Remedial actions in the Streamside Tailings Operable Unit as of spring 2014 [Source: Chavez and Mullen, 2014].

12.1 SUBAREA 1

Surface water sites in Subarea 1 include sites SS-07, SS-08, and SS-10A [Figure 1-2]. Groundwater monitoring clusters in Subarea 1 include the Colorado Tailings, Rocker, and Nissler clusters [Figure 3-1]. Remediation in Subarea 1 was completed between 1999-2003 [Figure 12-1].

In 2014, surface water COC concentrations generally increased throughout Subarea 1, particularly cadmium, copper, and zinc (in both the dissolved and total recoverable forms). Additional remedial actions are planned in Subarea 1 to address some of the remaining COC sources in the floodplain. Those actions should be completed in the 2015 and 2016 construction seasons.

In groundwater monitoring wells of Subarea 1, zinc concentrations have consistently exceeded the performance goal (by as much as five times) and cadmium concentrations have also occasionally exceeded the performance goal. Copper concentrations have not exceeded the performance goal during the period of record in these wells but have regularly been elevated in monitoring wells compared to the background wells.

12.1.1 Surface Water

12.1.1.1 Silver Bow Creek below WWTP (SS-07)

Site SS-07 is located at the upstream end of Subarea 1, immediately downstream from the Butte WWTP outfall. Site SS-07 is the upstream-most site in the SSTOU. Remediation was completed at SS-07 in 2000. In addition to representing conditions at the upstream-most portion of the SSTOU, site SS-07 provides an assessment of the influence of the WWTP on water chemistry and biological integrity in Silver Bow Creek. Site SS-07 is paired with site SS-06G, located immediately upstream from the WWTP, with SS-06G providing the "control" site and SS-07 providing the "impact" site for the WWTP outfall. Site SS-07 is co-located with USGS gauge 12323250. In 2014, copper and mercury were the only COC which exceeded the performance goal at SS-07.

12.1.1.2 Silver Bow Creek at Rocker (SS-08)

Site SS-08 is located in Subarea 1 near the town of Rocker, approximately two miles downstream from site SS-07. Site SS-08 was remediated in 2002. No tributaries enter Silver Bow Creek between SS-07 and SS-08. Therefore, any differences in streamflow (not due to measurement error) between SS-07 and SS-08 would likely be attributed to exchange between groundwater and surface water in this reach. In 2014, copper, lead, and mercury exceeded the performance goals at SS-08. COC exceedances of the performance goals occurred for copper in all quarters and in three quarters for mercury, but only in Q2 for lead. Commonly, COC concentrations were 1.5 to 2 times higher at SS-08 compared to SS-07, indicating that substantial COC loading or mobilization occurs between those sites.

12.1.1.3 Silver Bow Creek above Sand Creek (SS-10A)

Site SS-10A is located at the downstream end of Subarea 1, immediately upstream from the Sand Creek confluence, approximately 3 miles downstream from site SS-08. Remediation at site SS-10A was completed in 2003. In addition to representing conditions at the downstream end of Subarea 1, site SS-10A provides an assessment of the influence of Sand Creek on water chemistry and biological integrity in Silver Bow Creek. Site SS-10A is paired with site SS-10B,

located immediately downstream from the Sand Creek confluence, with SS-10A providing the "control" site and SS-10B providing the "impact" site for the Sand Creek input. Generally in 2014, COC concentrations were as high, or a little higher at SS-10A compared to SS-08 (although lead and zinc concentrations occasionally dipped slightly).

12.1.2 Groundwater

12.1.2.1 Colorado Tailings Cluster

The Colorado Tailings cluster is located approximately one mile downstream from the upstream end of Subarea 1 between surface water sites SS-07 and SS-08. The difference in mean streamflow between sites SS-08 and SS-07 from 2010-2014 (n = 20) was 0.16 cfs; mean streamflow at SS-08 was 31.91 cfs. Based on these data groundwater in this reach appears to contribute little (i.e., approximately 0.5%) to surface water streamflows. There are no surface water inputs to Silver Bow Creek in this reach.

In 2014, no COCs exceeded performance goals in groundwater samples in the Colorado Tailings cluster. However, COC concentrations were elevated in monitoring wells compared to the background well: cadmium, copper, and zinc by approximately two orders of magnitude; lead and mercury by approximately one order of magnitude. Despite historically elevated COC concentrations in the floodplain of Silver Bow Creek between SS-07 and SS-08, groundwater may not be a primary cause of increasing surface water COC concentrations between these sites given that it appears minimal groundwater enters Silver Bow Creek in this portion of Subarea 1.

12.1.2.2 Rocker Cluster

The Rocker cluster is located approximately 0.5 miles downstream from surface water site SS-08, and approximately 2 miles upstream from surface water site SS-10A. The difference in mean streamflow between sites SS-10A and SS-08 from 2010-2014 (n = 20) was -1.43 cfs; mean streamflow at SS-10a was 30.48 cfs. Based on these data there appears to be little or no groundwater input in this reach of Silver Bow Creek, and the reach actually appears to be losing surface water on average. There are no major surface water inputs in this reach of Silver Bow Creek.

In 2014, arsenic and zinc each exceeded the performance goal in one of two monitoring samples in the Rocker cluster. Several COC concentrations were elevated in monitoring wells compared to the background well: cadmium, copper, and zinc by approximately two orders of magnitude. Despite historically elevated COC concentrations in the floodplain of Silver Bow Creek between SS-08 and SS-10a, groundwater may not be a primary cause of increasing surface water COC concentrations between these sites given that it appears little or no groundwater enters Silver Bow Creek in this portion of Subarea 1.

12.1.2.3 Nissler Cluster

The Nissler cluster is located approximately 1.5 miles downstream from the Rocker cluster, and also between surface water sites SS-08 and SS-10A. The difference in mean streamflow between sites SS-10A and SS-08 from 2010-2014 (n = 20) was -1.43 cfs; mean streamflow at SS-10a was 30.48 cfs. Based on these data there appears to be little or no groundwater input in this reach of Silver Bow Creek, and the reach actually appears to be losing surface water on average. There are no major surface water inputs in this reach of Silver Bow Creek.

In 2014, cadmium and zinc each exceeded the performance goal in one of two monitoring samples in the Nissler cluster. Cadmium, copper, lead, and zinc concentrations in monitoring wells were elevated relative to the background concentrations; cadmium, copper and lead by approximately two orders of magnitude and zinc by nearly three orders of magnitude. Despite historically elevated COC concentrations in this portion of the floodplain of Silver Bow Creek between SS-08 and SS-10a, groundwater may not be a primary cause of increasing surface water COC concentrations between these sites given that it appears little or no groundwater enters Silver Bow Creek in this portion of Subarea 1.

12.2 SUBAREA 2

Subarea 2 includes sites SS-10B, SS-11C, SS-11D, SS-13, and SS-14 [Table 12-1]. Remediation in Subarea 1 was completed between 2004-2010 [Figure 12-1]. In 2014, surface water COC concentrations tended to level off in Subarea 2 in general. However, concentrations were more variable in Subarea 2. For example, in Q4 several COCs had total recoverable concentrations which were quite high and these concentrations coincided with very high turbidity and suspended sediment concentrations. As with Subarea 1, some additional remedial actions are planned in Subarea 2 in the 2015 and 2016 construction seasons to address some remaining COC sources in the floodplain.

In groundwater monitoring wells of Subarea 2, cadmium and zinc concentrations have consistently exceeded the performance goals in certain wells. Copper concentrations have previously exceeded the performance goal in one specific well, but has not exceeded that level since 2011 (the period of record in these wells). Copper has regularly been elevated in monitoring wells compared to the background wells.

12.2.1 Surface Water

12.2.1.1 Silver Bow Creek below Sand Creek (SS-10B)

Site SS-10B is located at the upstream end of Subarea 2, immediately downstream from the Sand Creek confluence, and approximately 200 yards downstream from site SS-10A. This reach of Silver Bow Creek was remediated in 2003. In addition to representing conditions at the upstream end of Subarea 2, site SS-10B provides an assessment of the influence of Sand Creek on water chemistry and biological integrity in Silver Bow Creek. Site SS-10B is paired with site

SS-10A, and is located immediately upstream from the Sand Creek confluence. SS-10A provides the "control" site, while SS-10B provides the "impact" site for the Sand Creek input. Surface water COC concentrations were similar between SS-10A and SS-10B in 2014, indicating that Sand Creek is not a major source of COCs to surface water in the SSTOU.

12.2.1.2 Silver Bow Creek above Browns Gulch (SS-11C)

Site SS-11C is located in Subarea 2, immediately upstream from the Browns Gulch confluence, and approximately 2.5 miles downstream from site SS-10B. Site SS-11C was remediated in 2006. Site SS-11C provides an assessment of the influence of Browns Gulch on water chemistry and biological integrity in Silver Bow Creek. Site SS-11C is paired with site SS-11D, which is located immediately downstream from the Browns Gulch confluence. SS-11C provides the "control" site, and SS-11D provides the "impact" site for the Browns Gulch input. Typically, COC concentrations were similar between SS-10B and SS-11C with the exception of zinc concentrations, which were approximately 50% higher during all quarters of 2014.

12.2.1.3 Silver Bow Creek below Browns Gulch (SS-11D)

Site SS-11D is located in Subarea 2, immediately downstream from the Browns Gulch confluence, approximately 200 yards downstream from site SS-11C. Site SS-11D was remediated in 2007. Site SS-11D provides an assessment of the influence of Browns Gulch on water chemistry and biological integrity in Silver Bow Creek. Site SS-11D is paired with site SS-11C (which is located immediately upstream from the Browns Gulch confluence), with SS-11C providing the "control" site and SS-11D providing the "impact" site for the Browns Gulch input. Generally, COC concentrations were similar between SS-11C and SS-11D but there was variability; during some quarters certain COC concentrations were higher at the upstream site but during other quarters that same COC concentration was higher at the downstream site.

12.2.1.4 Silver Bow Creek in Reach L (SS-13)

Site SS-13 is located in Subarea 2, downstream from the Browns Gulch confluence, approximately 0.75 miles downstream from site SS-11D. Site SS-13 was remediated in 2007, but this site was not sampled until 2013. During Q1, Q2, and Q3, COC concentrations were similar between site SS-11D and SS-13. However, during Q4 all total recoverable COC concentrations (except arsenic) increased by approximately 50-100%.

12.2.1.5 Silver Bow Creek at Miles Crossing (SS-14)

Site SS-14 is located near the downstream end of Subarea 2. Remediation was completed at SS-14 in 2008. Site SS-14 is located in the Miles Crossing area approximately 1 mile downstream from site SS-13. As with SS-13, COC concentrations were similar between SS-13 and SS-14 during all quarters except Q4. In Q4, COC concentrations were approximately 50-100% higher than at SS-13 and approximately 200% higher than at SS-11D.

12.2.2 Groundwater

12.2.2.1 Silver Bow Cluster

The Silver Bow cluster is located at the boundary between Subarea 1 and Subarea 2, close to the surface water site SS-10B. Surface water site SS-10B is located approximately 3 miles upstream from site SS-11C. The difference in mean streamflow between sites SS-11C and SS-10B from 2010-2014 (n = 20) was 4.01 cfs; mean streamflow at SS-11C was 33.99 cfs. Because there are no tributaries entering Silver Bow Creek between SS-10B and SS-11C, it appears that this reach has fairly substantial groundwater inputs with potentially 12% of the streamflow at SS-11C contributed by groundwater.

In 2014, cadmium exceeded the performance goal in one of two monitoring samples in the Silver Bow cluster. Generally, COC concentrations in the Silver Bow monitoring wells were elevated compared to the background wells, these concentrations were relatively low compared to wells in Subarea 1.

In 2014, zinc concentrations between SS-10B and SS-11C increased by approximately 50% during all sample periods. However, two Silver Bow monitoring wells have not had substantially elevated zinc concentrations since monitoring began in 2006. These wells may not be representative of the groundwater COC concentrations in the vicinity of the town of Ramsay, where the groundwater table appears to be high, and some of the groundwater inputs may occur.

12.2.2.2 Miles Crossing Cluster

The Miles Crossing cluster is located at the boundary between Subarea 2 and Subarea 3, close to the surface water site SS-14. Surface water site SS-15A is located approximately 5 miles downstream from SS-14. The difference in mean streamflow between sites SS-15A and SS-14 from 2010-2014 (n = 19) was -2.16 cfs; mean streamflow at SS-15A was 46.93 cfs. It appears that little or no groundwater enters Silver Bow Creek in this portion of Subarea 3.

In 2014, cadmium and zinc exceeded the performance goal in both monitoring wells in the Miles Crossing cluster and concentrations were nearly four orders of magnitude above the concentrations in the background well. In addition, the copper concentration in one of the monitoring wells was approximately three orders of magnitude above the background concentration.

12.3 SUBAREA 3

Subarea 3 includes sites SS-15A and SS-15B [Table 12-1]. Remediation in Subarea 3 has been in progress since 2011 and is scheduled for completion in 2015 [Figure 12-1]. However, all planned active remedial actions were complete in Subarea 3 upstream from sites SS-15A and SS-15B as of the end of 2014. Prior to 2014 monitoring, surface water COC concentrations tended to be the highest in the SSTOU at these Subarea 3 sites (particularly SS-15A) but in

2014 COC concentrations at these sites were generally similar to those in Subarea 2 or even slightly lower. In addition, the very elevated COC concentrations observed in lower Subarea 2 sites in Q4 2014 were not observed at these Subarea 3 sites during that time, nor were the elevated turbidity or suspended sediment concentrations. These results indicate that: 1) the recent remedial actions in Subarea 3 upstream from these sites were largely successful at reducing surface water COC concentrations and variability; and 2) the elevated suspended sediment and associated total recoverable COCs were sequestered in the stream channel somewhere between site SS-14 (Subarea 2) and SS-15A during Q4 2014.

12.3.1 Surface Water

12.3.1.1 Silver Bow Creek above German Gulch (SS-15A)

Site SS-15A is located in Subarea 3, immediately upstream from the German Gulch confluence and approximately 3.5 miles downstream from site SS-14. Remediation was mostly completed in Subarea 3 upstream from Site SS-15A in 2014. However, the stream channel and floodplain in the immediate vicinity of SS-15A (up to 100 yards upstream) was not actively remediated. The remediation plan in this vicinity is for natural attenuation of streamside tailings. No active remediation is planned because the stream passes through a very narrow canyon (~30 m) and the streambed is comprised primarily of bedrock indicating that the volume of tailings is quite small. Site SS-15A provides an assessment of the influence of German Gulch on water chemistry and biological integrity in Silver Bow Creek. Site SS-15A is paired with site SS-15B, located immediately downstream from the German Gulch confluence, with SS-15A providing the "control" site and SS-15B provides the "impact" site for the German Gulch input. The COC concentrations were similar at SS-14 and SS-15A during all quarters with the exception of Q4. However, during Q4, COC concentrations were substantially lower at SS-15A compared to SS-14. For example, cadmium and copper concentrations were approximately 75-80% lower at SS-15A compared to SS-14 in Q4.

12.3.1.2 Silver Bow Creek below German Gulch (SS-15B)

Site SS-15B is located in Subarea 3, immediately downstream from the German Gulch confluence and approximately 200 yards downstream from site SS-15A. As with site SS-15A, site SS-15B was not remediated in 2014 and no active remediation is planned for the stream channel in the immediate vicinity due to low tailings volumes. The remediation plan for this short reach (~300 yards; from SS-15B to 100 yards upstream from SS-15A) is for natural attenuation. By coincidence, site SS-15B happens to be located at the downstream end of the non-actively remediated reach of Subarea 3. SS-15B provides an assessment of the influence of German Gulch on water chemistry and biological integrity in Silver Bow Creek. Site SS-15B is paired with site SS-15A which is located immediately upstream from the German Gulch confluence. SS-15A provides the "control" site and SS-15B provides the "impact" site for the German Gulch input. All COC concentrations at SS-15B were lower (typically by about 33%) than at SS-15A during all quarters (with the exception of cadmium in Q2 which was similar but

slightly higher at SS-15B). These results are consistent with past results and reflect dilution from the relatively clean German Gulch tributary.

12.3.2 Groundwater

There are no groundwater monitoring wells in Subarea 3 at this time. The Miles Crossing cluster is located in Subarea 2 near the boundary with Subarea 3 and the Fairmont cluster is located in Subarea 4 near the boundary with Subarea 3.

12.4 SUBAREA 4

Subarea 4 includes sites SS-16B, SS-17D, and SS-19 [Table 12-1]. Remediation in Subarea 4 was largely complete as of 2014. Remediation in this subarea occurred from 2004-2014 [Figure 12-1]. Generally, COC concentrations have continued a steady, modest decline at the Subarea 4 sites during the last 5 years. However, remediation was in progress in Subarea 3 upstream from Subarea 4 in 2014. A temporary sedimentation pond used to sequester metals and sediments entrained from removal activities upstream was removed which had previously provided a buffer to water quality in Subarea 4.

12.4.1 Surface Water

12.4.1.1 Silver Bow Creek in Reach P near Fairmont (SS-16B)

Site SS-16B is located at the upstream end of Subarea 4. As of 2013, remediation was completed at site SS-16B. Site SS-16B is located approximately 2 miles downstream from site SS-15B. Active remediation was in progress between site SS-15B and SS-16B throughout 2014. As part of this remediation, a sedimentation pond was removed and a fish movement barrier was installed. Site SS-16B was first sampled in this monitoring program in 2013. In 2014, COC concentrations increased markedly between SS-15B and SS-16B which is not particularly surprising considering that active remediation was in progress in 2014 between these sites, including removal of the temporary impoundment dam between these sites. Although large increases were not observed during all quarters there were large increases in concentrations between these sites during certain quarters. The maximum quarterly increases in COC concentrations between SS-15B and SS-16B were approximately 200% for cadmium, approximately 100% for copper, nearly 400% for lead, nearly 500% for mercury, and approximately 100% for zinc.

12.4.1.2 Silver Bow Creek below Stewart Street at Opportunity (SS-17D)

Site SS-17D is located in Subarea 4, approximately 6.9 miles downstream from site SS-16B and approximately 1.5 miles upstream from the point where Silver Bow Creek discharges into the Warm Springs Pond system. Site SS-17D is co-located with USGS gauge 12323600. Floodplain remediation was complete at SS-17D in 2013. Generally all COC concentrations

were similar between SS-16B and SS-17D except for zinc, which was higher (by approximately 5-25%) at the downstream site (SS-17D) during all quarters. These results do not suggest that there were major remaining sources of COCs between these sites.

12.4.1.3 Silver Bow Creek at Frontage Road (SS-19)

Site SS-19 is located in Subarea 4, approximately 1.2 miles downstream from SS-17D, and 0.2 miles upstream from the point where Silver Bow Creek discharges into the Warm Springs Pond system. Site SS-19 is the downstream-most site in the SSTOU monitoring network, and also provides an assessment of water quality in Silver Bow Creek at the downstream end of Subarea 4. Sampling at SS-19 was initiated in 2014. All COC concentrations were similar between SS-17D and SS-19 suggesting that there were no major remaining sources of surface water COCs to the stream.

12.4.2 Groundwater

12.4.2.1 Fairmont Cluster

The Fairmont cluster is located at the boundary between Subarea 3 and Subarea 4, between surface water sites SS-15B and SS-16B. Surface water site SS-15B is located approximately 2 miles upstream from SS-16B. The difference in mean streamflow between sites SS-16B and SS-15B from 2013-2014 (n = 7) was -0.80 cfs; mean streamflow at SS-16B was 57.72 cfs. It appears that little or no groundwater enters Silver Bow Creek in this portion of Subarea 3.

In 2014, all COC concentrations in monitoring wells were below the performance goals and zinc was the only COC which had concentrations in monitoring wells that were elevated relative to the background wells (up to an order of magnitude higher).

12.4.2.2 Crackerville Cluster

The Crackerville cluster is located between surface water site SS-16B and SS-17D, approximately 0.5 miles downstream from SS-16B. The difference in mean streamflow between sites SS-17D and SS-16B from 2013-2014 (n = 6) was 1.66 cfs. It appears that this portion of Silver Bow Creek gains some water from groundwater inputs; however the number of streamflow measurements is relatively small.

In 2014, one monitoring well had a cadmium concentration which exceeded the performance goal.

12.4.2.3 Stuart Cluster

The Stuart cluster is located between surface water site SS-16B and SS-17D, approximately 1 mile upstream from SS-17D. The difference in mean streamflow between sites SS-17D and SS-16B from 2013-2014 (n = 6) was 1.66 cfs. It appears that this portion of Silver Bow Creek gains some water from groundwater inputs; however the number of streamflow measurements

is relatively small. In 2014, both monitoring wells had cadmium and zinc concentrations which exceeded the performance goal.

12.4.2.4 Frontage Road Cluster

The Frontage Road cluster is located near surface water site SS-19, at the downstream end of Subarea 4. Due to the relatively low number of surface water samples at SS-19 at this time, it is difficult to determine if Silver Bow Creek gains or loses streamflow between SS-17D and SS-19. In 2014, no monitoring wells in the Frontage Road cluster had a COC concentration exceeding the performance goal and all COC concentrations in the monitoring wells were similar to those in the background well.

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APPENDIX A

QUALITY ASSURANCE AND QUALITY CONTROL REVIEW AND SUMMARY: SURFACE WATER, INSTREAM SEDIMENT, GROUNDWATER, AND VADOSE ZONE WATER

APPENDIX A
QUALITY ASSURANCE AND QUALITY CONTROL REVIEW AND SUMMARY: SURFACE WATER, INSTREAM SEDIMENT, GROUNDWATER, AND VADOSE ZONE WATER

A.1 INTRODUCTION

Specific quality assurance and quality control (QA/QC) requirements for field measurements, sample collection, laboratory analysis, and the reporting of resulting data were established by protocols contained in the quality assurance project plan (QAPP), a component of the approved sampling and analysis plan (SAP) for the Silver Bow Creek Streamside Tailings Operable Unit (SSTOU). The following quality control checklist is a component of the Montana Department of Environmental Quality QA/QC protocols, and is an initial step in the review and validation of water chemistry and related data generated under the SSTOU environmental monitoring program. This checklist provides an outline for reviewing and assessing numerous factors potentially affecting data quality, and assists in identifying data that may be invalid or require additional documentation.

A.1 QUALITY CONTROL CHECKLIST

_+_ Condition of samples upon receipt

_-_ Sample temperature

- Sediment samples from the first (Q1), second (Q2), and third (Q3) quarter had temperatures >8 C upon receipt at lab.

_+_ Proper collection containers

_+_ Sample containers intact

_-_ Sample pH of acidified samples < 2

- Five nutrient samples from Q2 were submitted unpreserved; preservative was added at lab upon receipt.
- Two metals samples and one nutrient sample from Q2 were submitted unpreserved; preservatives were added at lab upon receipt.
- Dissolved metal samples for groundwater and vadose zone water were not field filtered or acidified in the field. These samples were filtered and preserved upon receipt at the laboratory.

_+_ All field documentation complete; if incomplete areas cannot be completed, document the issue

_+_ Holding times met

_-_ Field duplicates collected at the proper frequency (specified in the project SAP)

- Field duplicates of surface water and instream sediment samples were collected at a frequency of 12% in 2014 (two field duplicate samples per quarterly event).

- Field duplicates of groundwater and vadose zone water samples were collected at a frequency of 7% in Q2 and 8% in Q3 which is less than the project goal of at least 10%.

_-_ Field blanks collected at the proper frequency (specified in the project SAP)

- Field blanks of surface water and instream sediment samples were collected at a frequency of 12% in 2014 (two field blank samples per quarterly event).
- Field blanks of groundwater and vadose zone water samples were collected at a frequency of 7% during both quarters which is less than the project goal of at least 10%.

_+_ All sample IDs matched those provided in the SAP. Field duplicates were clearly marked on samples and noted the laboratory results.

- All sample ID discrepancies identified by the laboratory at the time of sample delivery to the lab were brought to the attention of the responsible RESPEC field personnel and discrepancies were fully resolved; all instances were documented in the laboratory analytical reports.

_+_ Analyses were carried out as described within the SAP (e.g. analytical methods, photo documentation, field protocols)

- Due to sample volume limitations, groundwater and vadose zone samples for dissolved metals from Q2 (16 samples) and Q3 (46 samples) were lab filtered rather than field filtered and were preserved after submission to the laboratory. The discrepancy between the SAP required method and the method followed was noted in the field form, analysis request and COC forms, and the laboratory analytical reports

_+_ Reporting limit complied with the SAP requested reporting limit

- The reporting limit (RL) for a specific sample analyte occasionally had to be increased by the laboratory due to chemical interference of the sample matrix. These instances are "D-flagged" in the analytical summary reports provided by Energy Laboratories (Appendix B), and will be similarly flagged in the data submitted to the EQUIS database.

_-_ All blanks were less than the project-required detection limit. All analyte concentrations were below reporting limits (RL) in the field blanks with the following exceptions:

- In Q1 surface water samples, chloride concentrations were 6 mg/L and 85 mg/L (RL = 1 mg/L) in each field blank, dissolved barium concentration was 0.020 mg/L and 0.013 mg/L (RL = 0.003 mg/L) in each field blank, dissolved zinc concentration was 0.009 mg/L (RL = 0.008 mg/L) in one field blank, and total recoverable aluminum concentration was 0.016 mg/L (RL = 0.009 mg/L) in one field blank.
- In Q2 surface water samples, dissolved barium concentration was 0.006 mg/L (RL = 0.003 mg/L) in one field blank and dissolved zinc concentration was 0.012 mg/L and 0.021 mg/L (RL = 0.008 mg/L) in each field blank.
- In Q3 surface water samples, dissolved barium concentration was 0.004 mg/L and 0.004 mg/L (RL = 0.003 mg/L) and dissolved zinc concentration was 0.013 mg/L and 0.015 mg/L (RL = 0.008 mg/L) in each field blank. In Q3 groundwater samples, dissolved zinc concentration was 0.010 mg/L (RL = 0.008 mg/L) in one field blank.

- In Q4 surface water samples, dissolved zinc concentrations were 0.009 mg/L and 0.009 mg/L (RL = 0.008 mg/L) in each field blank and total recoverable iron concentration was 0.04 mg/L (RL = 0.02 mg/L) in one field blank.

_+_ If any field blanks exceeded the SAP requested reporting limit, associated data may be qualified, or "B-flagged", in the project database. The MDEQ project manager will set the criteria for determining what data is associated and will be contacted to discuss field blank results prior to flagging data. The project precedent to date has been to flag any results less than ten times the blank value from a sample quarter in which the blank had a concentration above the RL. Following this precedent, the following samples would be B-flagged:

- All Q1 surface water chloride samples with concentrations <850 mg/L (21 samples).
- All Q1 surface water dissolved barium samples with concentrations <0.130 mg/L (21 samples), all Q2 samples with concentrations <0.060 mg/L (21 samples), and all Q3 samples with concentrations <0.040 mg/L (8 samples).
- All Q1 surface water dissolved zinc samples with concentrations <0.090 mg/L (15 samples), all Q2 samples with concentrations <0.210 mg/L (21 samples), all Q3 samples with concentrations <0.150 mg/L (21 samples), and all Q4 samples with concentrations <0.090 mg/L (11 samples).
- All Q4 surface water total recoverable iron samples with concentrations <0.40 mg/L (9 samples).
- All Q3 groundwater and vadose zone water samples with dissolved zinc concentrations <0.100 mg/L (29 samples).

_+_ Laboratory blanks, duplicates, matrix spikes, and control samples were analyzed at a 10% frequency

_+_ Laboratory blanks, duplicates, matrix spikes, and control samples were all within the required control limits defined within the SAP

_+_ Project DQOs and DQIs were met (as described in SAP)

_+_ Summary of QC analysis results, issues encountered and corrective actions was completed

A.3 SUMMARY OF QUALITY CONTROL AND ANALYSIS RESULTS

Summarized in this appendix are quality control measures performed on field and laboratory data generated from surface water, instream sediment, groundwater, and vadose zone water samples collected from the SSTOU during four quarterly monitoring events in 2014. Assessed under the MDEQ standard quality assurance and quality control protocols are data quality objectives (DQOs), including categories for: "representativeness", "comparability", and "completeness". Also assessed under the MDEQ standard quality assurance and quality control protocols are data quality indicators (DQIs) including categories for: "sensitivity", "lab precision", "overall precision", and "bias and accuracy".

Overall, DQOs and DQIs were met at all monitoring sites in the SSTOU during 2014. Surface water samples were collected and analyzed for total suspended sediment, nutrients,

metals (dissolved and total recoverable), and common ions at 17 sample sites on four occasions (quarterly) in 2014. Instream sediment samples were collected and analyzed for metals (total) at the 17 surface water sites during each quarter of 2014. Groundwater and vadose zone water samples were collected from monitoring wells and lysimeters during Q2 and Q3 and these samples were analyzed for dissolved metals and common ion concentrations.

A.3.1 Representativeness

All surface water, instream sediment, vadose zone water, and groundwater monitoring sites in the SSTOU sampled in 2014 met stated objectives for "spatial representativeness". That is, all monitoring sites were sampled at the established locations specified in the project SAP.

All surface water and instream sediment monitoring was conducted quarterly during 2014 as specified in the project SAP. Q1 monitoring occurred during base streamflow conditions prior to the onset of spring runoff. Q2 monitoring was conducted near the peak annual streamflow the during spring snowmelt runoff period. Biological monitoring was conducted in conjunction with Q3 surface water and instream sediment sampling, during low streamflows near the seasonal minimum within the specified index period for sampling the biota. Q4 monitoring occurred during base streamflow conditions as late in the season as possible, prior to winter ice up. Sampling activities during 2014 occurred within the last two weeks of the last month of each respective quarter, and all data met specified SSTOU criteria for temporal representativeness.

A.3.2 Comparability

Comparability is the applicability of project data to the remedial performance goals specified in the SAP for the various environmental media monitored under the project. The performance goal for surface water quality is for all contaminants of concern (COC) to meet the most restrictive of the state water quality standards for surface water (see Section 1.0). For instream sediment, the goal is for COC concentrations to meet the "threshold effect concentration" (TEC) (see Section 2.0). Performance goals for groundwater call for COC concentrations to meet state water quality standards, federal maximum contaminant levels (MCLs), and federal non-zero MCL goals through natural attenuation. All of these standards and levels apply to human health considerations. In addition, these goals require that no groundwater discharges occur that would prevent attainment of ambient Circular DEQ-7 surface water standards or instream sediment remediation goals in the SSTOU. All data acquired by the 2014 monitoring are applicable to assessing attainment of project performance goals.

A.3.3 Completeness

An overall data completeness goal of 85% was specified for the SSTOU project in 2014, and an evaluation table for data completeness is not required if the goal is met or exceeded. Data completeness for surface water and instream sediment samples from the 17 SSTOU monitoring sites was near 100%, with all chemical and physical parameters collected and analyzed during each of the four quarterly monitoring events in 2014. Water samples were collected and

analyzed from all SAP-specified groundwater monitoring wells and vadose zone lysimeters during the Q2 and Q3, although the available volume of water was often limited for vadose zone water samples.

A.3.4 Sensitivity

The method detection limit (MDL) established by Energy Laboratories through laboratory blank analyses is an expression of sensitivity. The MDL documented in QA/QC summary reports that accompany each set of laboratory analytical reports was less than the project-required reporting limit (RL), and was often below detection, for all analytical methods pertaining to SBC SSTOU monitoring (Appendix B).

Sensitivity of field methods for surface water samples was determined through deionized water field blank analyses. For surface water samples, field blanks were collected at a 12% proportion to regular samples during each quarterly monitoring event in 2014. Results for all metals, common ions and suspended sediment parameters in field blanks [Table A1 through Table A4] were below detection (ND) at the respective reporting limits with some exceptions as described in Section A.1. Some of those data will be qualified as also described in Section A.1. For groundwater samples, field blanks were collected at a 7% proportion to regular samples during the two sample periods. Results for all metals and common ion analytes in groundwater field blanks [Table A5 and Table A6] were below detection at the respective reporting limits with the exception of dissolved zinc in Q3. Some associated data will be subsequently qualified as described in Section A.1.

A.3.5 Precision

A.3.5.1 Laboratory

Laboratory precision was assessed by the relative percent difference (RPD) metric comparing laboratory samples with duplicates. RPD comparisons were made for all analytes measured in this program. Established criteria allow a maximum of 20% RPD for water sample results which are at least five times greater than the RL, and 35% RPD for sediment samples which are at least five times greater than the RL. No RPD values for internal duplicate analyses exceeded the criteria and required qualification of associated data, and no corrective actions were required (Appendix B).

A.3.5.2 Overall

The overall precision of surface water, instream sediment, and groundwater sample analyses in 2014 from the SSTOU was assessed by evaluation of RPD comparisons between samples and paired field duplicates. Surface water duplicate samples were collected at a frequency of 12% of the total number of field samples during all four quarterly events in 2014. Established criteria allow a maximum of 25% RPD for water sample results >5 times the RL, and 40% RPD for sediment samples >5 times the RL. All associated data which exceeds these criteria will be J-flagged in the project database.

Two surface water sample and duplicate pairs were collected in each quarterly sampling event and these were analyzed for dissolved and total recoverable metals, nutrients, and common ions [Table A7 through Table A14]. The pairs with RPD >25% in at least one quarterly pair which had concentrations at least five times greater than the RL included:

- total suspended sediment, total recoverable aluminum, iron, and lead, and dissolved cadmium in Q1;
- total suspended sediment, and total recoverable aluminum and copper in Q2;
- total nitrogen in Q3; and
- total recoverable mercury in Q4.

Groundwater and vadose zone water sample and duplicate pairs were collected in each quarterly sampling event and analyzed for dissolved metals and common ions [Table A15 through Table A18]. The pairs with RPD >25% in at least one quarterly pair which had concentrations at least five times greater than the RL included:

- dissolved aluminum, barium, cadmium, copper, uranium, and zinc in Q3.

Two instream sediment sample and duplicate pairs were collected in each quarterly sampling event and these were analyzed for total metals in three size fractions [Table A19 through Table A26]. The pairs with RPD >40% in at least one quarterly pair which had concentrations at least five times greater than the RL included:

- arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, vanadium, and zinc in the <0.065 mm size fraction in Q1;
- lead in the 0.065-1 mm size fraction in Q1;
- cadmium, copper, mercury, zinc in the <0.065 mm size fraction in Q2;
- arsenic, copper, lead, manganese, mercury, and zinc in the 0.065-1 mm size fraction in Q2;
- copper, manganese, and mercury in the 1-2 mm size fraction in Q2;
- manganese in the <0.065 mm size fraction in Q3;
- copper in the 0.065-1 mm size fraction in Q3;
- arsenic, copper, lead, manganese, and mercury in the 1-2 mm size fraction in Q3;
- barium, chromium, manganese, nickel in the <0.065 mm size fraction in Q4; and
- lead, manganese, mercury, and zinc in the 0.065-1 mm size fraction in Q4;
- lead, manganese, mercury, and zinc in the 1-2 mm size fraction in Q4;

A.3.1 Bias and Accuracy

Bias is defined as directional error from the true value of individual measurements. For field measurements (water temperature, pH, specific conductance, dissolved oxygen [DO] concentration, DO percent saturation, and turbidity), potential bias was addressed through frequent calibration of field instruments documented in calibration logs, and consistent field procedures. For water chemistry and sediment results, potential bias was minimized by adherence to approved field procedures for sample collection and handling, and decontamination of sampling equipment.

Accuracy is the combination of high precision and low bias. Accuracy of laboratory results was assessed by reviewing the analytical method controls (i.e., lab control sample, continuing

calibration verification, lab fortified blank, standard reference material) and analytical batch controls (i.e., matrix spike and matrix spike duplicate). Limits established by the laboratory through control charting of each method's performance served as assessment criteria. Any analytical method controls or analytical batch controls that had values outside of the acceptable recovery range were re-analyzed, as detailed in the analytical QC summary provided by Energy Laboratories and included with each analytical summary report (Appendix B).

Table A1. Analyte concentrations in the first quarter (March 24-25, 2014) surface water field blanks from the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Field blank (concentration; mg/L)	
		H14030374-012	H14030374-005
Solids, Total Suspended TSS @ 105 C	1	ND	ND
Alkalinity, Total as CaCO3	4	ND	ND
Bicarbonate Alkalinity as HCO3	4	ND	ND
Chloride	1	6	85
Sulfate	1	ND	ND
Hardness as CaCO3	1	ND	ND
Nitrogen, Ammonia	0.05	ND	ND
NO3+NO2 as N	0.05	ND	ND
N-Total	0.05	ND	ND
Phosphorus, Total as P	0.005	ND	ND
Aluminum, Dissolved	0.009	ND	ND
Antimony, Dissolved	0.0005	ND	ND
Arsenic, Dissolved	0.001	ND	ND
Barium, Dissolved	0.003	0.020	0.013
Beryllium, Dissolved	0.0008	ND	ND
Boron, Dissolved	0.1	ND	ND
Cadmium, Dissolved	0.00003	ND	ND
Chromium, Dissolved	0.01	ND	ND
Cobalt, Dissolved	0.01	ND	ND
Copper, Dissolved	0.001	ND	ND
Iron, Dissolved	0.02	ND	ND
Lead, Dissolved	0.0003	ND	ND
Manganese, Dissolved	0.001	ND	ND
Mercury, Dissolved	0.000005	ND	ND
Molybdenum, Dissolved	0.005	ND	ND
Nickel, Dissolved	0.002	ND	ND
Selenium, Dissolved	0.001	ND	ND
Silver, Dissolved	0.0002	ND	ND
Uranium, Dissolved	0.0002	ND	ND
Vanadium, Dissolved	0.1	ND	ND
Zinc, Dissolved	0.008	0.009	ND
Aluminum, Total Recoverable	0.009	0.016	ND
Antimony, Total Recoverable	0.0005	ND	ND
Arsenic, Total Recoverable	0.001	ND	ND
Barium, Total Recoverable	0.003	ND	ND
Beryllium, Total Recoverable	0.0008	ND	ND
Boron, Total Recoverable	0.1	ND	ND
Cadmium, Total Recoverable	0.00003	ND	ND
Calcium, Total Recoverable	1	ND	ND
Chromium, Total Recoverable	0.01	ND	ND
Cobalt, Total Recoverable	0.01	ND	ND
Copper, Total Recoverable	0.001	ND	ND

Iron, Total Recoverable	0.02	ND	ND
Lead, Total Recoverable	0.0003	ND	ND
Magnesium, Total Recoverable	1	ND	ND
Manganese, Total Recoverable	0.001	ND	ND
Mercury, Total Recoverable	0.000005	ND	ND
Molybdenum, Total Recoverable	0.005	ND	ND
Nickel, Total Recoverable	0.002	ND	ND
Potassium, Total Recoverable	1	ND	ND
Selenium, Total Recoverable	0.001	ND	ND
Silver, Total Recoverable	0.0002	ND	ND
Sodium, Total Recoverable	1	ND	ND
Uranium, Total Recoverable	0.0002	ND	ND
Vanadium, Total Recoverable	0.1	ND	ND
Zinc, Total Recoverable	0.008	ND	ND

ND	Not detected at analytical reporting limit.
	Field blank concentration exceeds reporting limit. We recommend "B-flagging" all analyte concentrations (which are <10 times the blank value) from this sample period in the project database.

Table A2. Analyte concentrations in the second quarter (June 2-3, 2014) surface water field blanks from the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Field blank (concentration; mg/L)	
		H14060106-008	H14060105-001
Solids, Total Suspended TSS @ 105 C	1	ND	ND
Alkalinity, Total as CaCO3	4	ND	ND
Bicarbonate Alkalinity as HCO3	4	ND	ND
Chloride	1	ND	ND
Sulfate	1	ND	ND
Hardness as CaCO3	1	ND	ND
Nitrogen, Ammonia	0.05	ND	ND
NO3+NO2 as N	0.05	ND	ND
N-Total	0.05	ND	ND
Phosphorus, Total as P	0.005	ND	ND
Aluminum, Dissolved	0.009	ND	ND
Antimony, Dissolved	0.0005	ND	ND
Arsenic, Dissolved	0.001	ND	ND
Barium, Dissolved	0.003	0.006	ND
Beryllium, Dissolved	0.0008	ND	ND
Boron, Dissolved	0.1	ND	ND
Cadmium, Dissolved	0.00003	ND	ND
Chromium, Dissolved	0.01	ND	ND
Cobalt, Dissolved	0.01	ND	ND
Copper, Dissolved	0.001	ND	ND
Iron, Dissolved	0.02	ND	ND
Lead, Dissolved	0.0003	ND	ND
Manganese, Dissolved	0.001	ND	ND
Mercury, Dissolved	0.000005	ND	ND
Molybdenum, Dissolved	0.005	ND	ND
Nickel, Dissolved	0.002	ND	ND
Selenium, Dissolved	0.001	ND	ND
Silver, Dissolved	0.0002	ND	ND
Uranium, Dissolved	0.0002	ND	ND
Vanadium, Dissolved	0.1	ND	ND
Zinc, Dissolved	0.008	0.012	0.021
Aluminum, Total Recoverable	0.009	ND	ND
Antimony, Total Recoverable	0.0005	ND	ND
Arsenic, Total Recoverable	0.001	ND	ND
Barium, Total Recoverable	0.003	ND	ND
Beryllium, Total Recoverable	0.0008	ND	ND
Boron, Total Recoverable	0.1	ND	ND
Cadmium, Total Recoverable	0.00003	ND	ND
Calcium, Total Recoverable	1	ND	ND
Chromium, Total Recoverable	0.01	ND	ND
Cobalt, Total Recoverable	0.01	ND	ND
Copper, Total Recoverable	0.001	ND	ND

Iron, Total Recoverable	0.02	ND	ND
Lead, Total Recoverable	0.0003	ND	ND
Magnesium, Total Recoverable	1	ND	ND
Manganese, Total Recoverable	0.001	ND	ND
Mercury, Total Recoverable	0.000005	ND	ND
Molybdenum, Total Recoverable	0.005	ND	ND
Nickel, Total Recoverable	0.002	ND	ND
Potassium, Total Recoverable	1	ND	ND
Selenium, Total Recoverable	0.001	ND	ND
Silver, Total Recoverable	0.0002	ND	ND
Sodium, Total Recoverable	1	ND	ND
Uranium, Total Recoverable	0.0002	ND	ND
Vanadium, Total Recoverable	0.1	ND	ND
Zinc, Total Recoverable	0.008	ND	ND

ND	Not detected at analytical reporting limit.
	Field blank concentration exceeds reporting limit. We recommend "B-flagging" all analyte concentrations (which are <10 times the blank value) from this sample period in the project database.

Table A3. Analyte concentrations in the third quarter (September 9-10, 2014) surface water field blanks from the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Field blank (concentration; mg/L)	
		H14090234-013	H14090234-005
Solids, Total Suspended TSS @ 105 C	1	ND	ND
Alkalinity, Total as CaCO3	4	ND	ND
Bicarbonate Alkalinity as HCO3	4	ND	ND
Chloride	1	ND	ND
Sulfate	1	ND	ND
Hardness as CaCO3	1	ND	ND
Nitrogen, Ammonia	0.05	ND	ND
NO3+NO2 as N	0.05	ND	ND
N-Total	0.05	ND	ND
Phosphorus, Total as P	0.005	ND	ND
Aluminum, Dissolved	0.009	ND	ND
Antimony, Dissolved	0.0005	ND	ND
Arsenic, Dissolved	0.001	ND	ND
Barium, Dissolved	0.003	0.004	0.004
Beryllium, Dissolved	0.0008	ND	ND
Boron, Dissolved	0.1	ND	ND
Cadmium, Dissolved	0.00003	ND	ND
Chromium, Dissolved	0.01	ND	ND
Cobalt, Dissolved	0.01	ND	ND
Copper, Dissolved	0.001	ND	ND
Iron, Dissolved	0.02	ND	ND
Lead, Dissolved	0.0003	ND	ND
Manganese, Dissolved	0.001	ND	ND
Mercury, Dissolved	0.000005	ND	ND
Molybdenum, Dissolved	0.005	ND	ND
Nickel, Dissolved	0.002	ND	ND
Selenium, Dissolved	0.001	ND	ND
Silver, Dissolved	0.0002	ND	ND
Uranium, Dissolved	0.0002	ND	ND
Vanadium, Dissolved	0.1	ND	ND
Zinc, Dissolved	0.008	0.015	0.013
Aluminum, Total Recoverable	0.009	ND	ND
Antimony, Total Recoverable	0.0005	ND	ND
Arsenic, Total Recoverable	0.001	ND	ND
Barium, Total Recoverable	0.003	ND	ND
Beryllium, Total Recoverable	0.0008	ND	ND
Boron, Total Recoverable	0.1	ND	ND
Cadmium, Total Recoverable	0.00003	ND	ND
Calcium, Total Recoverable	1	ND	ND
Chromium, Total Recoverable	0.01	ND	ND
Cobalt, Total Recoverable	0.01	ND	ND
Copper, Total Recoverable	0.001	ND	ND

Iron, Total Recoverable	0.02	ND	ND
Lead, Total Recoverable	0.0003	ND	ND
Magnesium, Total Recoverable	1	ND	ND
Manganese, Total Recoverable	0.001	ND	ND
Mercury, Total Recoverable	0.000005	ND	ND
Molybdenum, Total Recoverable	0.005	ND	ND
Nickel, Total Recoverable	0.002	ND	ND
Potassium, Total Recoverable	1	ND	ND
Selenium, Total Recoverable	0.001	ND	ND
Silver, Total Recoverable	0.0002	ND	ND
Sodium, Total Recoverable	1	ND	ND
Uranium, Total Recoverable	0.0002	ND	ND
Vanadium, Total Recoverable	0.1	ND	ND
Zinc, Total Recoverable	0.008	ND	ND

ND	Not detected at analytical reporting limit.
	Field blank concentration exceeds reporting limit. We recommend "B-flagging" all analyte concentrations (which are <10 times the blank value) from this sample period in the project database.

Table A4. Analyte concentrations in the fourth quarter (December 3-4, 2014) surface water field blanks from the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Field blank (concentration; mg/L)	
		H14120109-008	H14120110-001
Solids, Total Suspended TSS @ 105 C	1	ND	ND
Alkalinity, Total as CaCO3	4	ND	ND
Bicarbonate Alkalinity as HCO3	4	ND	ND
Chloride	1	ND	ND
Sulfate	1	ND	ND
Hardness as CaCO3	1	ND	ND
Nitrogen, Ammonia	0.05	ND	ND
NO3+NO2 as N	0.05	ND	ND
N-Total	0.05	ND	ND
Phosphorus, Total as P	0.005	ND	ND
Aluminum, Dissolved	0.009	ND	ND
Antimony, Dissolved	0.0005	ND	ND
Arsenic, Dissolved	0.001	ND	ND
Barium, Dissolved	0.003	ND	ND
Beryllium, Dissolved	0.0008	ND	ND
Boron, Dissolved	0.1	ND	ND
Cadmium, Dissolved	0.00003	ND	ND
Chromium, Dissolved	0.01	ND	ND
Cobalt, Dissolved	0.01	ND	ND
Copper, Dissolved	0.001	ND	ND
Iron, Dissolved	0.02	ND	ND
Lead, Dissolved	0.0003	ND	ND
Manganese, Dissolved	0.001	ND	ND
Mercury, Dissolved	0.000005	ND	ND
Molybdenum, Dissolved	0.005	ND	ND
Nickel, Dissolved	0.002	ND	ND
Selenium, Dissolved	0.001	ND	ND
Silver, Dissolved	0.0002	ND	ND
Uranium, Dissolved	0.0002	ND	ND
Vanadium, Dissolved	0.1	ND	ND
Zinc, Dissolved	0.008	0.009	0.009
Aluminum, Total Recoverable	0.009	ND	ND
Antimony, Total Recoverable	0.0005	ND	ND
Arsenic, Total Recoverable	0.001	ND	ND
Barium, Total Recoverable	0.003	ND	ND
Beryllium, Total Recoverable	0.0008	ND	ND
Boron, Total Recoverable	0.1	ND	ND
Cadmium, Total Recoverable	0.00003	ND	ND
Calcium, Total Recoverable	1	ND	ND
Chromium, Total Recoverable	0.01	ND	ND
Cobalt, Total Recoverable	0.01	ND	ND
Copper, Total Recoverable	0.001	ND	ND

Iron, Total Recoverable	0.02	ND	0.04
Lead, Total Recoverable	0.0003	ND	ND
Magnesium, Total Recoverable	1	ND	ND
Manganese, Total Recoverable	0.001	ND	ND
Mercury, Total Recoverable	0.000005	ND	ND
Molybdenum, Total Recoverable	0.005	ND	ND
Nickel, Total Recoverable	0.002	ND	ND
Potassium, Total Recoverable	1	ND	ND
Selenium, Total Recoverable	0.001	ND	ND
Silver, Total Recoverable	0.0002	ND	ND
Sodium, Total Recoverable	1	ND	ND
Uranium, Total Recoverable	0.0002	ND	ND
Vanadium, Total Recoverable	0.1	ND	ND
Zinc, Total Recoverable	0.008	ND	ND

ND	Not detected at analytical reporting limit.
	Field blank concentration exceeds reporting limit. We recommend "B-flagging" all analyte concentrations (which are <10 times the blank value) from this sample period in the project database.

Table A5. Analyte concentrations in the second quarter (June 4, 2014) groundwater field blanks from the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Field blank (concentration; mg/L)
		H14060159-016
Alkalinity, Total as CaCO3	4	ND
Bicarbonate Alkalinity as HCO3	4	ND
Chloride	1	ND
Sulfate	1	ND
Hardness as CaCO3	1	ND
Aluminum, Dissolved	0.009	ND
Antimony, Dissolved	0.0009	ND
Arsenic, Dissolved	0.001	ND
Barium, Dissolved	0.003	ND
Beryllium, Dissolved	0.0008	ND
Boron, Dissolved	0.1	ND
Cadmium, Dissolved	0.00003	ND
Calcium, Dissolved	1	ND
Chromium, Dissolved	0.01	ND
Cobalt, Dissolved	0.01	ND
Copper, Dissolved	0.001	ND
Iron, Dissolved	0.02	ND
Lead, Dissolved	0.0003	ND
Magnesium, Dissolved	1	ND
Manganese, Dissolved	0.001	ND
Mercury, Dissolved	0.000005	ND
Molybdenum, Dissolved	0.005	ND
Nickel, Dissolved	0.002	ND
Potassium, Dissolved	1	ND
Selenium, Dissolved	0.001	ND
Silver, Dissolved	0.0002	ND
Sodium, Dissolved	1	ND
Uranium, Dissolved	0.0002	ND
Vanadium, Dissolved	0.1	ND
Zinc, Dissolved	0.008	ND

ND — Not detected at analytical reporting limit.

Field blank concentration exceeds reporting limit. We recommend "B-flagging" all analyte concentrations (which are <10 times the blank value) from this sample period in the project database.

Table A6. Analyte concentrations in the third quarter (September 4-5, 2014) groundwater field blanks from the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Field blank (concentration; mg/L)		
		H14090136-013	H14090136-032	H14090136-021
Alkalinity, Total as CaCO3	4	ND	ND	ND
Bicarbonate Alkalinity as HCO3	4	ND	ND	ND
Chloride	1	ND	ND	ND
Sulfate	1	ND	ND	ND
Hardness as CaCO3	1	ND	ND	ND
Aluminum, Dissolved	0.009	ND	ND	ND
Antimony, Dissolved	0.0009	ND	ND	ND
Arsenic, Dissolved	0.001	ND	ND	ND
Barium, Dissolved	0.003	ND	ND	ND
Beryllium, Dissolved	0.0008	ND	ND	ND
Boron, Dissolved	0.1	ND	ND	ND
Cadmium, Dissolved	0.00003	ND	ND	ND
Calcium, Dissolved	1	ND	ND	ND
Chromium, Dissolved	0.01	ND	ND	ND
Cobalt, Dissolved	0.01	ND	ND	ND
Copper, Dissolved	0.001	ND	ND	ND
Iron, Dissolved	0.02	ND	ND	ND
Lead, Dissolved	0.0003	ND	ND	ND
Magnesium, Dissolved	1	ND	ND	ND
Manganese, Dissolved	0.001	ND	ND	ND
Mercury, Dissolved	0.000005	ND	ND	ND
Molybdenum, Dissolved	0.005	ND	ND	ND
Nickel, Dissolved	0.002	ND	ND	ND
Potassium, Dissolved	1	ND	ND	ND
Selenium, Dissolved	0.001	ND	ND	ND
Silver, Dissolved	0.0002	ND	ND	ND
Sodium, Dissolved	1	ND	ND	ND
Uranium, Dissolved	0.0002	ND	ND	ND
Vanadium, Dissolved	0.1	ND	ND	ND
Zinc, Dissolved	0.008	ND	0.010	ND

ND — Not detected at analytical reporting limit.

Field blank concentration exceeds reporting limit. We recommend "B-flagging" all analyte concentrations (which are <10 times the blank value) from this sample period in the project database.

Table A7. Analyte concentrations in the first quarter (March 24, 2014) surface water field sample (H14030374-012) and field duplicate (H14030374-005) from site SS-13 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14030374-012	H14030374-005	
Solids, Total Suspended TSS @ 105 C	1	18	11	48
Alkalinity, Total as CaCO3	4	110	110	0
Bicarbonate Alkalinity as HCO3	4	130	130	0
Chloride	1	51	50	2
Sulfate	1	96	91	5
Hardness as CaCO3	1	181	181	0
Nitrogen, Ammonia	0.05	0.8	0.8	0
NO3+NO2 as N	0.05	1.33	1.32	1
N-Total	0.05	2.74	2.68	2
Phosphorus, Total as P	0.005	0.325	0.3	8
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.008	0.007	13
Barium, Dissolved	0.003	0.048	0.049	2
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.00012	0.00008	40
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.01	0.01	0
Iron, Dissolved	0.02	0.09	0.08	12
Lead, Dissolved	0.0003	0.0003	0.0003	0
Manganese, Dissolved	0.001	0.221	0.22	0
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	ND	ND	-
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0062	0.006	3
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.034	0.035	3
Aluminum, Total Recoverable	0.009	0.289	0.218	28
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.008	0.008	0
Barium, Total Recoverable	0.003	0.046	0.043	7
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.00038	0.0003	24
Calcium, Total Recoverable	1	52	52	0
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.024	0.019	23
Iron, Total Recoverable	0.02	0.56	0.42	29
Lead, Total Recoverable	0.0003	0.0034	0.0021	47
Magnesium, Total Recoverable	1	13	13	0
Manganese, Total Recoverable	0.001	0.265	0.247	7
Mercury, Total Recoverable	0.000005	0.000014	0.000009	43
Molybdenum, Total Recoverable	0.005	0.005	0.005	0
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	6	6	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	30	31	3
Uranium, Total Recoverable	0.0002	0.0066	0.0065	2
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.08	0.066	19

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown (i.e., ND).
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all associated data in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A8. Analyte concentrations in the first quarter (March 25, 2014) surface water field sample (H14030374-003) and field duplicate (H14030374-004) from site SS-08 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14030374-003	H14030374-004	
Solids, Total Suspended TSS @ 105 C	1	8	6	29
Alkalinity, Total as CaCO3	4	120	120	0
Bicarbonate Alkalinity as HCO3	4	140	140	0
Chloride	1	39	38	3
Sulfate	1	89	85	5
Hardness as CaCO3	1	160	159	1
Nitrogen, Ammonia	0.05	3.9	4.2	7
NO3+NO2 as N	0.05	1.25	1.25	0
N-Total	0.05	7.4	7.4	0
Phosphorus, Total as P	0.005	0.45	0.526	16
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.005	0.005	0
Barium, Dissolved	0.003	0.05	0.048	4
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.00024	0.00012	67
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.01	0.01	0
Iron, Dissolved	0.02	0.17	0.14	19
Lead, Dissolved	0.0003	0.0005	0.0005	0
Manganese, Dissolved	0.001	0.214	0.2	7
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	0.005	0.005	0
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0057	0.0056	2
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.057	0.054	5
Aluminum, Total Recoverable	0.009	0.099	0.11	11
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.005	0.005	0
Barium, Total Recoverable	0.003	0.042	0.042	0
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.00025	0.00023	8
Calcium, Total Recoverable	1	43	43	0
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.016	0.017	6
Iron, Total Recoverable	0.02	0.39	0.39	0
Lead, Total Recoverable	0.0003	0.0023	0.0023	0
Magnesium, Total Recoverable	1	13	13	0
Manganese, Total Recoverable	0.001	0.226	0.23	2
Mercury, Total Recoverable	0.000005	0.000011	0.000009	20
Molybdenum, Total Recoverable	0.005	0.005	0.005	0
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	6	6	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	27	27	0
Uranium, Total Recoverable	0.0002	0.006	0.0061	2
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.071	0.069	3

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A9. Analyte concentrations in the second quarter (June 2, 2014) surface water field sample (H14060106-009) and field duplicate (H14060106-010) from site SS-13 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14060106-009	H14060106-010	
Solids, Total Suspended TSS @ 105 C	1	14	15	7
Alkalinity, Total as CaCO3	4	91	90	1
Bicarbonate Alkalinity as HCO3	4	110	110	0
Chloride	1	20	20	0
Sulfate	1	52	53	2
Hardness as CaCO3	1	133	132	1
Nitrogen, Ammonia	0.05	0.12	0.11	9
NO3+NO2 as N	0.05	1.37	1.37	0
N-Total	0.05	1.12	1.14	2
Phosphorus, Total as P	0.005	0.329	0.324	2
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.013	0.013	0
Barium, Dissolved	0.003	0.036	0.035	3
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.00008	0.00008	0
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.012	0.012	0
Iron, Dissolved	0.02	0.13	0.13	0
Lead, Dissolved	0.0003	0.0005	0.0005	0
Manganese, Dissolved	0.001	0.13	0.132	2
Mercury, Dissolved	0.000005	0.000006	0.000005	18
Molybdenum, Dissolved	0.005	ND	ND	-
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0027	0.0027	0
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.022	0.022	0
Aluminum, Total Recoverable	0.009	0.27	0.183	38
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.014	0.013	7
Barium, Total Recoverable	0.003	0.034	0.03	13
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.00022	0.00022	0
Calcium, Total Recoverable	1	36	29	22
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.02	0.018	11
Iron, Total Recoverable	0.02	0.56	0.44	24
Lead, Total Recoverable	0.0003	0.0031	0.0028	10
Magnesium, Total Recoverable	1	8	7	13
Manganese, Total Recoverable	0.001	0.182	0.168	8
Mercury, Total Recoverable	0.000005	0.000017	0.000018	6
Molybdenum, Total Recoverable	0.005	ND	ND	-
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	5	4	22
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	24	20	18
Uranium, Total Recoverable	0.0002	0.0029	0.0026	11
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.051	0.056	9

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A10. Analyte concentrations in the second quarter (June 3, 2014) surface water field sample (H14060105-002) and field duplicate (H14060105-003) from site SS-01 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14060105-002	H14060105-003	
Solids, Total Suspended TSS @ 105 C	1	8	5	46
Alkalinity, Total as CaCO3	4	66	66	0
Bicarbonate Alkalinity as HCO3	4	79	79	0
Chloride	1	5	5	0
Sulfate	1	14	14	0
Hardness as CaCO3	1	72	79	9
Nitrogen, Ammonia	0.05	ND	ND	-
NO3+NO2 as N	0.05	0.12	0.12	0
N-Total	0.05	0.5	0.54	8
Phosphorus, Total as P	0.005	0.115	0.109	5
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.008	0.008	0
Barium, Dissolved	0.003	0.034	0.032	6
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	ND	ND	-
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.006	0.006	0
Iron, Dissolved	0.02	0.34	0.32	6
Lead, Dissolved	0.0003	ND	ND	-
Manganese, Dissolved	0.001	0.028	0.028	0
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	ND	ND	-
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0012	0.0012	0
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	ND	0.01	-
Aluminum, Total Recoverable	0.009	0.219	0.192	13
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.009	0.009	0
Barium, Total Recoverable	0.003	0.028	0.029	4
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.00005	0.00005	0
Calcium, Total Recoverable	1	22	22	0
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.009	0.015	50
Iron, Total Recoverable	0.02	0.86	0.86	0
Lead, Total Recoverable	0.0003	0.0008	0.0008	0
Magnesium, Total Recoverable	1	6	6	0
Manganese, Total Recoverable	0.001	0.059	0.061	3
Mercury, Total Recoverable	0.000005	0.000009	0.000008	12
Molybdenum, Total Recoverable	0.005	ND	ND	-
Nickel, Total Recoverable	0.002	0.002	0.010	133
Potassium, Total Recoverable	1	2	2	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	8	8	0
Uranium, Total Recoverable	0.0002	0.0013	0.0013	0
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.008	0.009	12

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A11. Analyte concentrations in the third quarter (September 9, 2014) surface water field sample (H14090234-011) and field duplicate (H14090234-012) from site SS-14 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14090234-011	H14090234-012	
Solids, Total Suspended TSS @ 105 C	1	4	4	0
Alkalinity, Total as CaCO3	4	96	96	0
Bicarbonate Alkalinity as HCO3	4	95	95	0
Chloride	1	51	52	2
Sulfate	1	100	100	0
Hardness as CaCO3	1	190	189	1
Nitrogen, Ammonia	0.05	ND	ND	-
NO3+NO2 as N	0.05	2.06	2.12	3
N-Total	0.05	2.76	2.79	1
Phosphorus, Total as P	0.005	0.249	0.251	1
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.008	0.008	0
Barium, Dissolved	0.003	0.038	0.036	5
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.00015	0.00017	13
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.013	0.013	0
Iron, Dissolved	0.02	0.04	0.04	0
Lead, Dissolved	0.0003	ND	0.0003	-
Manganese, Dissolved	0.001	0.045	0.045	0
Mercury, Dissolved	0.000005	0.000006	0.000006	0
Molybdenum, Dissolved	0.005	0.006	0.006	0
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0052	0.0054	4
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.018	0.018	0
Aluminum, Total Recoverable	0.009	0.087	0.083	5
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.008	0.008	0
Barium, Total Recoverable	0.003	0.033	0.033	0
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.00023	0.00023	0
Calcium, Total Recoverable	1	58	59	2
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.018	0.018	0
Iron, Total Recoverable	0.02	0.19	0.19	0
Lead, Total Recoverable	0.0003	0.0011	0.0011	0
Magnesium, Total Recoverable	1	13	13	0
Manganese, Total Recoverable	0.001	0.081	0.082	1
Mercury, Total Recoverable	0.000005	0.000012	0.000011	9
Molybdenum, Total Recoverable	0.005	0.006	0.006	0
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	6	6	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	37	37	0
Uranium, Total Recoverable	0.0002	0.0055	0.0055	0
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.033	0.034	3

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A12. Analyte concentrations in the third quarter (September 10, 2014) surface water field sample (H14090234-003) and field duplicate (H14090234-004) from site SS-08 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14090234-003	H14090234-004	
Solids, Total Suspended TSS @ 105 C	1	6	6	0
Alkalinity, Total as CaCO3	4	90	90	0
Bicarbonate Alkalinity as HCO3	4	110	110	0
Chloride	1	32	32	0
Sulfate	1	86	85	1
Hardness as CaCO3	1	170	170	0
Nitrogen, Ammonia	0.05	0.13	0.13	0
NO3+NO2 as N	0.05	3.93	3.86	2
N-Total	0.05	7	5.1	31
Phosphorus, Total as P	0.005	0.35	0.31	12
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.005	0.005	0
Barium, Dissolved	0.003	0.043	0.045	5
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.00013	0.00013	0
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.009	0.009	0
Iron, Dissolved	0.02	0.08	0.08	0
Lead, Dissolved	0.0003	0.0005	0.0005	0
Manganese, Dissolved	0.001	0.068	0.068	0
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	0.005	0.005	0
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0038	0.0038	0
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.051	0.054	6
Aluminum, Total Recoverable	0.009	0.113	0.12	6
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.006	0.006	0
Barium, Total Recoverable	0.003	0.039	0.039	0
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.00025	0.00025	0
Calcium, Total Recoverable	1	50	50	0
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.017	0.017	0
Iron, Total Recoverable	0.02	0.33	0.34	3
Lead, Total Recoverable	0.0003	0.0029	0.0029	0
Magnesium, Total Recoverable	1	12	12	0
Manganese, Total Recoverable	0.001	0.093	0.094	1
Mercury, Total Recoverable	0.000005	0.000025	0.000016	44
Molybdenum, Total Recoverable	0.005	0.005	0.005	0
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	6	6	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	30	30	0
Uranium, Total Recoverable	0.0002	0.0042	0.0041	2
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.064	0.065	2

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A13. Analyte concentrations in the fourth quarter (December 3, 2014) surface water field sample (H14120109-009) and field duplicate (H14120109-010) from site SS-13 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14120109-009	H14120109-010	
Solids, Total Suspended TSS @ 105 C	1	50	49	2
Alkalinity, Total as CaCO3	4	110	110	0
Bicarbonate Alkalinity as HCO3	4	140	140	0
Chloride	1	48	49	2
Sulfate	1	98	99	1
Hardness as CaCO3	1	206	204	1
Nitrogen, Ammonia	0.05	1.45	1.51	4
NO3+NO2 as N	0.05	1.69	1.68	1
N-Total	0.05	4.6	4.6	0
Phosphorus, Total as P	0.005	0.477	0.481	1
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.005	0.005	0
Barium, Dissolved	0.003	0.04	0.042	5
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.0001	0.0001	0
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.008	0.008	0
Iron, Dissolved	0.02	0.05	0.05	0
Lead, Dissolved	0.0003	ND	ND	-
Manganese, Dissolved	0.001	0.342	0.333	3
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	0.005	0.005	0
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.0054	0.0053	2
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.108	0.107	1
Aluminum, Total Recoverable	0.009	1.14	1.03	10
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.008	0.008	0
Barium, Total Recoverable	0.003	0.061	0.058	5
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	0.0009	0.00086	5
Calcium, Total Recoverable	1	61	60	2
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.071	0.068	4
Iron, Total Recoverable	0.02	1.64	1.52	8
Lead, Total Recoverable	0.0003	0.012	0.0111	8
Magnesium, Total Recoverable	1	13	13	0
Manganese, Total Recoverable	0.001	0.584	0.555	5
Mercury, Total Recoverable	0.000005	0.000086	0.000055	44
Molybdenum, Total Recoverable	0.005	0.005	0.005	0
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	6	6	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	32	31	3
Uranium, Total Recoverable	0.0002	0.006	0.0059	2
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.236	0.231	2

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A14. Analyte concentrations in the fourth quarter (December 4, 2014) surface water field sample (H14120110-002) and field duplicate (H14120110-003) from site SS-01 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14120110-002	H14120110-003	
Solids, Total Suspended TSS @ 105 C	1	5	6	18
Alkalinity, Total as CaCO3	4	94	94	0
Bicarbonate Alkalinity as HCO3	4	110	110	0
Chloride	1	16	16	0
Sulfate	1	24	25	4
Hardness as CaCO3	1	118	119	1
Nitrogen, Ammonia	0.05	ND	ND	-
NO3+NO2 as N	0.05	1.2	1.19	1
N-Total	0.05	1.29	1.26	2
Phosphorus, Total as P	0.005	0.083	0.084	1
Aluminum, Dissolved	0.009	ND	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.002	0.002	0
Barium, Dissolved	0.003	0.049	0.048	2
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	ND	ND	-
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.001	0.001	0
Iron, Dissolved	0.02	0.08	0.07	13
Lead, Dissolved	0.0003	ND	ND	-
Manganese, Dissolved	0.001	0.064	0.063	2
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	ND	ND	-
Nickel, Dissolved	0.002	ND	ND	-
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Uranium, Dissolved	0.0002	0.003	0.003	0
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	ND	ND	-
Aluminum, Total Recoverable	0.009	0.125	0.121	3
Antimony, Total Recoverable	0.0005	ND	ND	-
Arsenic, Total Recoverable	0.001	0.002	0.002	0
Barium, Total Recoverable	0.003	0.05	0.05	0
Beryllium, Total Recoverable	0.0008	ND	ND	-
Boron, Total Recoverable	0.1	ND	ND	-
Cadmium, Total Recoverable	0.00003	ND	0.00004	-
Calcium, Total Recoverable	1	33	33	0
Chromium, Total Recoverable	0.01	ND	ND	-

Cobalt, Total Recoverable	0.01	ND	ND	-
Copper, Total Recoverable	0.001	0.003	0.003	0
Iron, Total Recoverable	0.02	0.43	0.43	0
Lead, Total Recoverable	0.0003	0.0005	0.0005	0
Magnesium, Total Recoverable	1	9	9	0
Manganese, Total Recoverable	0.001	0.069	0.071	3
Mercury, Total Recoverable	0.000005	ND	ND	-
Molybdenum, Total Recoverable	0.005	ND	ND	-
Nickel, Total Recoverable	0.002	ND	ND	-
Potassium, Total Recoverable	1	3	3	0
Selenium, Total Recoverable	0.001	ND	ND	-
Silver, Total Recoverable	0.0002	ND	ND	-
Sodium, Total Recoverable	1	13	13	0
Uranium, Total Recoverable	0.0002	0.0032	0.0032	0
Vanadium, Total Recoverable	0.1	ND	ND	-
Zinc, Total Recoverable	0.008	0.01	ND	-

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A15. Analyte concentrations in the second quarter (June 4, 2014) groundwater field sample (H14060159-013) and field duplicate (H14060159-015) from site 1GW-1056 in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14060159-013	H14060159-015	
Alkalinity, Total as CaCO3	4	120	120	0
Bicarbonate Alkalinity as HCO3	4	150	150	0
Chloride	1	17	17	0
Sulfate	1	190	190	0
Hardness as CaCO3	1	272	267	2
Aluminum, Dissolved	0.009	0.027	0.029	7
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.007	0.007	0
Barium, Dissolved	0.003	0.031	0.031	0
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	ND	ND	-
Calcium, Dissolved	1	81	80	1
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	ND	ND	-
Iron, Dissolved	0.02	0.02	0.03	40
Lead, Dissolved	0.0003	ND	ND	-
Magnesium, Dissolved	1	17	17	0
Manganese, Dissolved	0.001	0.001	0.001	0
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	0.007	0.007	0
Nickel, Dissolved	0.002	ND	ND	-
Potassium, Dissolved	1	3	3	0
Selenium, Dissolved	0.001	0.004	0.004	0
Silver, Dissolved	0.0002	ND	ND	-
Sodium, Dissolved	1	28	28	0
Uranium, Dissolved	0.0002	0.0461	0.0461	0
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	ND	ND	-

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A16. Analyte concentrations in the third quarter (September 3, 2014) groundwater field sample (H14090136-008) and field duplicate (H14090136-004) from site MW-2A in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14090136-008	H14090136-004	
Alkalinity, Total as CaCO3	4	120	130	8
Bicarbonate Alkalinity as HCO3	4	150	150	0
Chloride	1	4	4	0
Sulfate	1	220	220	0
Hardness as CaCO3	1	270	271	0
Aluminum, Dissolved	0.009	0.010	ND	-
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.01	0.01	0
Barium, Dissolved	0.003	0.013	0.013	0
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	ND	ND	-
Calcium, Dissolved	1	86	87	1
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	ND	0.001	-
Iron, Dissolved	0.02	ND	ND	-
Lead, Dissolved	0.0003	ND	ND	-
Magnesium, Dissolved	1	13	13	0
Manganese, Dissolved	0.001	ND	ND	-
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	0.008	0.008	0
Nickel, Dissolved	0.002	ND	ND	-
Potassium, Dissolved	1	3	3	0
Selenium, Dissolved	0.001	0.01	0.01	0
Silver, Dissolved	0.0002	ND	ND	-
Sodium, Dissolved	1	26	26	0
Uranium, Dissolved	0.0002	0.0388	0.0393	1
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	ND	ND	-

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A17. Analyte concentrations in the third quarter (September 4, 2014) groundwater field sample (H14090136-024) and field duplicate (H14090136-030) from site P-39R in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14090136-024	H14090136-030	
Alkalinity, Total as CaCO3	4	310	310	0
Bicarbonate Alkalinity as HCO3	4	370	370	0
Chloride	1	140	140	0
Sulfate	1	260	260	0
Hardness as CaCO3	1	542	555	2
Aluminum, Dissolved	0.009	0.068	ND	>153
Antimony, Dissolved	0.0005	ND	ND	-
Arsenic, Dissolved	0.001	0.011	0.011	0
Barium, Dissolved	0.003	0.136	0.134	1
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	0.2	0.2	0
Cadmium, Dissolved	0.00003	0.00022	ND	-
Calcium, Dissolved	1	169	174	3
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.043	0.033	26
Iron, Dissolved	0.02	0.06	0.02	100
Lead, Dissolved	0.0003	ND	ND	-
Magnesium, Dissolved	1	29	30	3
Manganese, Dissolved	0.001	0.004	0.002	67
Mercury, Dissolved	0.000005	ND	ND	-
Molybdenum, Dissolved	0.005	ND	ND	-
Nickel, Dissolved	0.002	0.002	0.003	40
Potassium, Dissolved	1	13	14	7
Selenium, Dissolved	0.001	0.002	0.002	0
Silver, Dissolved	0.0002	ND	ND	-
Sodium, Dissolved	1	91	95	4
Uranium, Dissolved	0.0002	0.0330	0.0323	2
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.022	0.019	15

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A18. Analyte concentrations in the third quarter (September 5, 2014) groundwater field sample (H14090136-040) and field duplicate (H14090136-039) from site GW-FM-WS in the Streamside Tailings Operable Unit.

Analyte	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
		H14090136-040	H14090136-039	
Alkalinity, Total as CaCO3	4	140	130	7
Bicarbonate Alkalinity as HCO3	4	170	160	6
Chloride	1	23	23	0
Sulfate	1	58	59	2
Hardness as CaCO3	1	178	168	6
Aluminum, Dissolved	0.009	0.017	0.037	74
Antimony, Dissolved	0.0005	0.0014	ND	-
Arsenic, Dissolved	0.001	0.002	0.003	40
Barium, Dissolved	0.003	0.220	0.116	62
Beryllium, Dissolved	0.0008	ND	ND	-
Boron, Dissolved	0.1	ND	ND	-
Cadmium, Dissolved	0.00003	0.00018	ND	>143
Calcium, Dissolved	1	53	50	6
Chromium, Dissolved	0.01	ND	ND	-
Cobalt, Dissolved	0.01	ND	ND	-
Copper, Dissolved	0.001	0.011	0.008	32
Iron, Dissolved	0.02	ND	0.04	-
Lead, Dissolved	0.0003	ND	ND	-
Magnesium, Dissolved	1	11	10	10
Manganese, Dissolved	0.001	1.480	1.600	8
Mercury, Dissolved	0.000005	0.000008	0.000006	29
Molybdenum, Dissolved	0.005	0.014	0.009	43
Nickel, Dissolved	0.002	0.003	0.003	0
Potassium, Dissolved	1	5	4	22
Selenium, Dissolved	0.001	ND	ND	-
Silver, Dissolved	0.0002	ND	ND	-
Sodium, Dissolved	1	25	23	8
Uranium, Dissolved	0.0002	0.0168	0.0070	82
Vanadium, Dissolved	0.1	ND	ND	-
Zinc, Dissolved	0.008	0.120	0.017	150

ND	Not detected at analytical reporting limit.
-	Relative percent difference unknown because one or both of the concentrations was unknown.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.
	Relative percent difference of sample and duplicate pair exceeds project goal (25%). However, because both of the concentrations was <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A19. Analyte concentrations in the first quarter (March 25, 2014) instream sediment field sample (H14030374-028-30) and field duplicate (H14030374-031-33) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14030374-028-30	H14030374-031-33	
Aluminum, Total	<0.065	10	41,900	28,900	37
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	38	20	62
Barium, Total	<0.065	5	264	146	58
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	13	8	48
Cadmium, Total	<0.065	0.5	7.4	4.0	60
Chromium, Total	<0.065	5	38	17	76
Cobalt, Total	<0.065	5	ND	ND	-
Copper, Total	<0.065	5	417	245	52
Iron, Total	<0.065	8	33,100	21,100	44
Lead, Total	<0.065	9	232	135	53
Manganese, Total	<0.065	5	2,380	1,450	49
Mercury, Total	<0.065	0.1	0.9	0.6	47
Molybdenum, Total	<0.065	5	6	ND	-
Nickel, Total	<0.065	5	24	10	82
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	ND	ND	-
Uranium, Total	<0.065	5	7	ND	-
Vanadium, Total	<0.065	2	47	28	51
Zinc, Total	<0.065	5	1,250	725	53
Aluminum, Total	0.065-1	5	15,900	21,600	30
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	13	16	21
Barium, Total	0.065-1	5	209	266	24
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	ND	ND	-
Cadmium, Total	0.065-1	0.2	3.0	3.4	13
Chromium, Total	0.065-1	5	10	9	11
Cobalt, Total	0.065-1	5	ND	ND	-
Copper, Total	0.065-1	5	145	152	5
Iron, Total	0.065-1	5	17,500	19,400	10
Lead, Total	0.065-1	5	138	143	4
Manganese, Total	0.065-1	5	1,500	1,740	15
Mercury, Total	0.065-1	0.1	0.6	0.5	20
Molybdenum, Total	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	ND	5	-
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	ND	ND	-

Vanadium, Total	0.065-1	1	35	32	9
Zinc, Total	0.065-1	5	496	671	30
Aluminum, Total	1-2	5	25,600	24,800	3
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	18	14	25
Barium, Total	1-2	5	244	221	10
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	ND	ND	-
Cadmium, Total	1-2	0.2	2.4	1.6	40
Chromium, Total	1-2	5	9	9	0
Cobalt, Total	1-2	5	5	5	0
Copper, Total	1-2	5	129	87	39
Iron, Total	1-2	5	18,800	18,200	3
Lead, Total	1-2	5	89	100	12
Manganese, Total	1-2	5	1,460	1,710	16
Mercury, Total	1-2	0.1	0.6	0.6	2
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	ND	ND	-
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	25	23	8
Zinc, Total	1-2	5	349	331	5

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A20. Analyte concentrations in the first quarter (March 25, 2014) instream sediment field sample (H14030374-028-30) and field duplicate (H14030374-034-36) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14030374-028-30	H14030374-034-36	
Aluminum, Total	<0.065	10	41,900	38,400	9
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	38	26	38
Barium, Total	<0.065	5	264	255	3
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	13	14	7
Cadmium, Total	<0.065	0.5	7.4	6.1	19
Chromium, Total	<0.065	5	38	31	20
Cobalt, Total	<0.065	5	ND	ND	-
Copper, Total	<0.065	5	417	262	46
Iron, Total	<0.065	8	33,100	29,500	12
Lead, Total	<0.065	9	232	177	27
Manganese, Total	<0.065	5	2,380	1,930	21
Mercury, Total	<0.065	0.1	0.9	0.7	33
Molybdenum, Total	<0.065	5	6	ND	-
Nickel, Total	<0.065	5	24	18	29
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	ND	ND	-
Uranium, Total	<0.065	5	7	ND	-
Vanadium, Total	<0.065	2	47	45	4
Zinc, Total	<0.065	5	1,250	795	44
Aluminum, Total	0.065-1	5	15,900	13,200	19
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	13	14	7
Barium, Total	0.065-1	5	209	187	11
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	ND	ND	-
Cadmium, Total	0.065-1	0.2	3.0	2.4	22
Chromium, Total	0.065-1	5	10	13	26
Cobalt, Total	0.065-1	5	ND	ND	-
Copper, Total	0.065-1	5	145	124	16
Iron, Total	0.065-1	5	17,500	19,600	11
Lead, Total	0.065-1	5	138	1,010	152
Manganese, Total	0.065-1	5	1,500	1,270	17
Mercury, Total	0.065-1	0.1	0.6	0.5	14
Molybdenum, Total	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	ND	ND	-
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	ND	ND	-

Vanadium, Total	0.065-1	1	35	46	27
Zinc, Total	0.065-1	5	496	437	13
Aluminum, Total	1-2	5	25,600	22,700	12
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	18	14	25
Barium, Total	1-2	5	244	205	17
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	ND	ND	-
Cadmium, Total	1-2	0.2	2.4	2.9	19
Chromium, Total	1-2	5	9	9	0
Cobalt, Total	1-2	5	5	5	0
Copper, Total	1-2	5	129	102	23
Iron, Total	1-2	5	18,800	17,500	7
Lead, Total	1-2	5	89	94	5
Manganese, Total	1-2	5	1,460	1,870	25
Mercury, Total	1-2	0.1	0.6	0.6	3
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	ND	ND	-
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	25	28	11
Zinc, Total	1-2	5	349	297	16

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A21. Analyte concentrations in the second quarter (June 3, 2014) instream sediment field sample (H14060106-026-28) and field duplicate (H14060106-032-34) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14060106-026-28	H14060106-032-34	
Aluminum, Total	<0.065	10	32,600	24,600	28
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	63	43	38
Barium, Total	<0.065	5	335	316	6
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	ND	8	-
Cadmium, Total	<0.065	0.5	11.7	7.7	41
Chromium, Total	<0.065	5	78	65	18
Cobalt, Total	<0.065	5	15	12	22
Copper, Total	<0.065	5	757	520	37
Iron, Total	<0.065	8	32,200	28,800	11
Lead, Total	<0.065	9	282	209	30
Manganese, Total	<0.065	5	1,840	1,580	15
Mercury, Total	<0.065	0.1	1.4	0.7	62
Molybdenum, Total	<0.065	5	9	7	25
Nickel, Total	<0.065	5	46	34	30
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	ND	ND	-
Uranium, Total	<0.065	5	10	7	35
Vanadium, Total	<0.065	2	67	55	20
Zinc, Total	<0.065	5	2,140	1,320	47
Aluminum, Total	0.065-1	5	18,500	16,300	13
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	26	20	26
Barium, Total	0.065-1	5	265	236	12
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	ND	6	-
Cadmium, Total	0.065-1	0.2	5.5	4.7	16
Chromium, Total	0.065-1	5	18	24	29
Cobalt, Total	0.065-1	5	10	8	22
Copper, Total	0.065-1	5	367	281	27
Iron, Total	0.065-1	5	26,000	29,900	14
Lead, Total	0.065-1	5	159	90	55
Manganese, Total	0.065-1	5	1,280	966	28
Mercury, Total	0.065-1	0.1	0.8	0.5	51
Molybdenum, Total	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	11	10	10
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	5	ND	-

Vanadium, Total	0.065-1	1	60	76	24
Zinc, Total	0.065-1	5	901	712	23
Aluminum, Total	1-2	5	17,100	18,000	5
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	12	13	8
Barium, Total	1-2	5	236	201	16
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	ND	ND	-
Cadmium, Total	1-2	0.2	2.1	1.5	33
Chromium, Total	1-2	5	ND	7	-
Cobalt, Total	1-2	5	ND	6	-
Copper, Total	1-2	5	112	76	38
Iron, Total	1-2	5	14,400	15,300	6
Lead, Total	1-2	5	56	58	4
Manganese, Total	1-2	5	993	1,210	20
Mercury, Total	1-2	0.1	0.2	0.3	36
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	ND	ND	-
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	25	22	13
Zinc, Total	1-2	5	325	334	3

ND Not detected at analytical reporting limit.

- Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A22. Analyte concentrations in the second quarter (June 3, 2014) instream sediment field sample (H14060106-026-28) and field duplicate (H14060106-035-37) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14060106-026-28	H14060106-035-37	
Aluminum, Total	<0.065	10	32,600	30,200	8
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	63	50	23
Barium, Total	<0.065	5	335	337	1
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	ND	15	-
Cadmium, Total	<0.065	0.5	11.7	6.2	61
Chromium, Total	<0.065	5	78	68	14
Cobalt, Total	<0.065	5	15	13	14
Copper, Total	<0.065	5	757	465	48
Iron, Total	<0.065	8	32,200	34,300	6
Lead, Total	<0.065	9	282	236	18
Manganese, Total	<0.065	5	1,840	1,550	17
Mercury, Total	<0.065	0.1	1.4	1.1	24
Molybdenum, Total	<0.065	5	9	5	57
Nickel, Total	<0.065	5	46	34	30
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	ND	ND	-
Uranium, Total	<0.065	5	10	7	35
Vanadium, Total	<0.065	2	67	71	6
Zinc, Total	<0.065	5	2,140	1,150	60
Aluminum, Total	0.065-1	5	18,500	13,400	32
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	26	17	42
Barium, Total	0.065-1	5	265	214	21
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	ND	6	-
Cadmium, Total	0.065-1	0.2	5.5	3.7	39
Chromium, Total	0.065-1	5	18	18	0
Cobalt, Total	0.065-1	5	10	7	35
Copper, Total	0.065-1	5	367	201	58
Iron, Total	0.065-1	5	26,000	22,500	14
Lead, Total	0.065-1	5	159	90	55
Manganese, Total	0.065-1	5	1,280	812	45
Mercury, Total	0.065-1	0.1	0.8	0.5	53
Molybdenum, Total	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	11	9	20
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	5	ND	-

Vanadium, Total	0.065-1	1	60	52	14
Zinc, Total	0.065-1	5	901	488	59
Aluminum, Total	1-2	5	17,100	15,700	9
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	12	14	15
Barium, Total	1-2	5	236	234	1
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	ND	ND	-
Cadmium, Total	1-2	0.2	2.1	1.5	33
Chromium, Total	1-2	5	ND	6	-
Cobalt, Total	1-2	5	ND	ND	-
Copper, Total	1-2	5	112	68	49
Iron, Total	1-2	5	14,400	13,200	9
Lead, Total	1-2	5	56	38	38
Manganese, Total	1-2	5	993	659	40
Mercury, Total	1-2	0.1	0.2	0.7	117
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	ND	ND	-
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	25	17	38
Zinc, Total	1-2	5	325	283	14

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A23. Analyte concentrations in the third quarter (September 10, 2014) instream sediment field sample (H14090234-028-30) and field duplicate (H14090234-031-33) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14090234-028-30	H14090234-031-33	
Aluminum, Total	<0.065	10	19,900	25,600	25
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	51	48	6
Barium, Total	<0.065	5	282	344	20
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	ND	ND	-
Cadmium, Total	<0.065	0.5	8.3	9.0	8
Chromium, Total	<0.065	5	28	26	7
Cobalt, Total	<0.065	5	ND	ND	-
Copper, Total	<0.065	5	665	677	2
Iron, Total	<0.065	8	25,100	29,100	15
Lead, Total	<0.065	9	285	359	23
Manganese, Total	<0.065	5	1,030	1,640	46
Mercury, Total	<0.065	0.1	1.5	1.7	13
Molybdenum, Total	<0.065	5	13	8	48
Nickel, Total	<0.065	5	13	13	0
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	ND	ND	-
Uranium, Total	<0.065	5	8	7	13
Vanadium, Total	<0.065	2	53	57	7
Zinc, Total	<0.065	5	1,550	1,650	6
Aluminum, Total	0.065-1	5	18,500	18,400	1
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	23	15	42
Barium, Total	0.065-1	5	195	186	5
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	ND	ND	-
Cadmium, Total	0.065-1	0.2	5.2	4.8	8
Chromium, Total	0.065-1	5	12	8	40
Cobalt, Total	0.065-1	5	ND	ND	-
Copper, Total	0.065-1	5	299	198	41
Iron, Total	0.065-1	5	19,900	17,400	13
Lead, Total	0.065-1	5	160	135	17
Manganese, Total	0.065-1	5	1,060	942	12
Mercury, Total	0.065-1	0.1	0.9	0.6	38
Molybdenum, Total	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	6	ND	-
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	ND	ND	-

Vanadium, Total	0.065-1	1	39	29	29
Zinc, Total	0.065-1	5	808	593	31
Aluminum, Total	1-2	5	26,900	28,600	6
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	18	18	0
Barium, Total	1-2	5	347	421	19
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	ND	ND	-
Cadmium, Total	1-2	0.2	3.5	2.8	22
Chromium, Total	1-2	5	8	7	13
Cobalt, Total	1-2	5	ND	ND	-
Copper, Total	1-2	5	145	127	13
Iron, Total	1-2	5	23,000	23,400	2
Lead, Total	1-2	5	65	182	95
Manganese, Total	1-2	5	955	1,860	64
Mercury, Total	1-2	0.1	0.3	0.1	83
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	ND	ND	-
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	26	29	11
Zinc, Total	1-2	5	575	609	6

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A24. Analyte concentrations in the third quarter (September 10, 2014) instream sediment field sample (H14090234-028-30) and field duplicate (H14090234-034-36) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14090234-028-30	H14090234-034-36	
Aluminum, Total	<0.065	10	19,900	24,000	19
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	51	53	4
Barium, Total	<0.065	5	282	309	9
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	ND	ND	-
Cadmium, Total	<0.065	0.5	8.3	9.4	12
Chromium, Total	<0.065	5	28	27	4
Cobalt, Total	<0.065	5	ND	ND	-
Copper, Total	<0.065	5	665	745	11
Iron, Total	<0.065	8	25,100	27,700	10
Lead, Total	<0.065	9	285	333	16
Manganese, Total	<0.065	5	1,030	860	18
Mercury, Total	<0.065	0.1	1.5	1.7	13
Molybdenum, Total	<0.065	5	13	13	0
Nickel, Total	<0.065	5	13	15	14
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	ND	ND	-
Uranium, Total	<0.065	5	8	11	32
Vanadium, Total	<0.065	2	53	58	9
Zinc, Total	<0.065	5	1,550	1,740	12
Aluminum, Total	0.065-1	5	18,500	17,500	6
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	23	27	16
Barium, Total	0.065-1	5	195	209	7
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	ND	ND	-
Cadmium, Total	0.065-1	0.2	5.2	6.5	22
Chromium, Total	0.065-1	5	12	10	18
Cobalt, Total	0.065-1	5	ND	ND	-
Copper, Total	0.065-1	5	299	249	18
Iron, Total	0.065-1	5	19,900	19,400	3
Lead, Total	0.065-1	5	160	166	4
Manganese, Total	0.065-1	5	1,060	734	36
Mercury, Total	0.065-1	0.1	0.9	0.8	11
Molybdenum, Total	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	6	5	18
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	ND	ND	-

Vanadium, Total	0.065-1	1	39	35	11
Zinc, Total	0.065-1	5	808	1,170	37
Aluminum, Total	1-2	5	26,900	26,700	1
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	18	31	53
Barium, Total	1-2	5	347	343	1
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	ND	ND	-
Cadmium, Total	1-2	0.2	3.5	3.4	3
Chromium, Total	1-2	5	8	8	0
Cobalt, Total	1-2	5	ND	ND	-
Copper, Total	1-2	5	145	224	43
Iron, Total	1-2	5	23,000	21,000	9
Lead, Total	1-2	5	65	80	21
Manganese, Total	1-2	5	955	844	12
Mercury, Total	1-2	0.1	0.3	0.6	61
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	ND	ND	-
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	26	24	8
Zinc, Total	1-2	5	575	596	4

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A25. Analyte concentrations in the fourth quarter (December 4, 2014) instream sediment field sample (H14120109-026-28) and field duplicate (H14120109-029-31) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14120109-026-28	H14120109-029-31	
Aluminum, Total	<0.065	10	46,700	33,900	32
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	77	78	1
Barium, Total	<0.065	5	635	415	42
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	ND	ND	-
Cadmium, Total	<0.065	0.5	13.1	13.5	3
Chromium, Total	<0.065	5	78	140	57
Cobalt, Total	<0.065	5	16	16	0
Copper, Total	<0.065	5	1,170	1,170	0
Iron, Total	<0.065	8	49,300	39,500	22
Lead, Total	<0.065	9	468	376	22
Manganese, Total	<0.065	5	2,280	1,390	49
Mercury, Total	<0.065	0.1	1.6	1.9	17
Molybdenum, Total	<0.065	5	17	19	11
Nickel, Total	<0.065	5	48	80	50
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	5	ND	-
Uranium, Total	<0.065	5	11	13	17
Vanadium, Total	<0.065	2	98	82	18
Zinc, Total	<0.065	5	2,660	2,580	3
Aluminum, Total	0.065-1	5	20,700	21,000	1
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	22	33	40
Barium, Total	0.065-1	5	226	297	27
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	9	11	20
Cadmium, Total	0.065-1	0.2	5.4	7.9	38
Chromium, Total	0.065-1	5	12	24	67
Cobalt, Total	0.065-1	5	7	9	25
Copper, Total	0.065-1	5	388	516	28
Iron, Total	0.065-1	5	21,100	24,300	14
Lead, Total	0.065-1	5	170	159	7
Manganese, Total	0.065-1	5	1,210	786	42
Mercury, Total	0.065-1	0.1	1.4	1.0	33
Molybdenum, Total	0.065-1	5	ND	6	-
Nickel, Total	0.065-1	5	7	14	67
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	ND	7	-

Vanadium, Total	0.065-1	1	40	47	16
Zinc, Total	0.065-1	5	947	1,190	23
Aluminum, Total	1-2	5	35,500	33,500	6
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	16	23	36
Barium, Total	1-2	5	306	295	4
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	9	10	11
Cadmium, Total	1-2	0.2	3.3	5.3	47
Chromium, Total	1-2	5	9	17	62
Cobalt, Total	1-2	5	7	8	13
Copper, Total	1-2	5	141	268	62
Iron, Total	1-2	5	23,500	25,100	7
Lead, Total	1-2	5	151	131	14
Manganese, Total	1-2	5	1,210	1,180	3
Mercury, Total	1-2	0.1	0.7	0.6	13
Molybdenum, Total	1-2	5	ND	ND	-
Nickel, Total	1-2	5	6	11	59
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	6	-
Vanadium, Total	1-2	1	33	38	14
Zinc, Total	1-2	5	642	885	32

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

Table A26. Analyte concentrations in the fourth quarter (December 4, 2014) instream sediment field sample (H14120109-026-28) and field duplicate (H14120109-032-34) from site SS-10A in the Streamside Tailings Operable Unit.

Analyte	Size fraction (mm)	Reporting limit (mg/L)	Concentration (mg/L)		Relative percent difference (%)
			H14120109-026-28	H14120109-032-34	
Aluminum, Total	<0.065	10	46,700	35,200	28
Antimony, Total	<0.065	5	ND	ND	-
Arsenic, Total	<0.065	5	77	81	5
Barium, Total	<0.065	5	635	415	42
Beryllium, Total	<0.065	5	ND	ND	-
Boron, Total	<0.065	5	ND	ND	-
Cadmium, Total	<0.065	0.5	13.1	11.8	10
Chromium, Total	<0.065	5	78	31	86
Cobalt, Total	<0.065	5	16	14	13
Copper, Total	<0.065	5	1,170	1,020	14
Iron, Total	<0.065	8	49,300	41,100	18
Lead, Total	<0.065	9	468	483	3
Manganese, Total	<0.065	5	2,280	1,360	51
Mercury, Total	<0.065	0.1	1.6	1.7	6
Molybdenum,	<0.065	5	17	15	13
Nickel, Total	<0.065	5	48	17	95
Selenium, Total	<0.065	5	ND	ND	-
Silver, Total	<0.065	5	5	ND	-
Uranium, Total	<0.065	5	11	13	17
Vanadium, Total	<0.065	2	98	69	35
Zinc, Total	<0.065	5	2,660	2,460	8
Aluminum, Total	0.065-1	5	20,700	19,000	9
Antimony, Total	0.065-1	5	ND	ND	-
Arsenic, Total	0.065-1	5	22	33	40
Barium, Total	0.065-1	5	226	200	12
Beryllium, Total	0.065-1	5	ND	ND	-
Boron, Total	0.065-1	5	9	7	25
Cadmium, Total	0.065-1	0.2	5.4	4.5	18
Chromium, Total	0.065-1	5	12	9	29
Cobalt, Total	0.065-1	5	7	6	15
Copper, Total	0.065-1	5	388	273	35
Iron, Total	0.065-1	5	21,100	19,100	10
Lead, Total	0.065-1	5	170	113	40
Manganese, Total	0.065-1	5	1,210	627	63
Mercury, Total	0.065-1	0.1	1.4	0.7	62
Molybdenum,	0.065-1	5	ND	ND	-
Nickel, Total	0.065-1	5	7	5	33
Selenium, Total	0.065-1	5	ND	ND	-
Silver, Total	0.065-1	5	ND	ND	-
Uranium, Total	0.065-1	5	ND	ND	-

Vanadium, Total	0.065-1	1	40	35	13
Zinc, Total	0.065-1	5	947	615	43
Aluminum, Total	1-2	5	35,500	38,400	8
Antimony, Total	1-2	5	ND	ND	-
Arsenic, Total	1-2	5	16	13	21
Barium, Total	1-2	5	306	296	3
Beryllium, Total	1-2	5	ND	ND	-
Boron, Total	1-2	5	9	8	12
Cadmium, Total	1-2	0.2	3.3	2.3	36
Chromium, Total	1-2	5	9	8	12
Cobalt, Total	1-2	5	7	7	0
Copper, Total	1-2	5	141	118	18
Iron, Total	1-2	5	23,500	24,500	4
Lead, Total	1-2	5	151	82	59
Manganese, Total	1-2	5	1,210	762	45
Mercury, Total	1-2	0.1	0.7	0.2	102
Molybdenum,	1-2	5	ND	ND	-
Nickel, Total	1-2	5	6	5	18
Selenium, Total	1-2	5	ND	ND	-
Silver, Total	1-2	5	ND	ND	-
Uranium, Total	1-2	5	ND	ND	-
Vanadium, Total	1-2	1	33	28	16
Zinc, Total	1-2	5	642	414	43

ND — Not detected at analytical reporting limit.

\- — Relative percent difference unknown because one or both of the concentrations was unknown.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). We recommend "J-flagging" all analyte concentrations (which are >5 times the reporting limit) from this sample period in the project database.

Relative percent difference of sample and duplicate pair exceeds project goal (40%). However, because both of the concentrations were <5 times the reporting limit we do not recommend "J-flagging" any analytes in the project database.

APPENDIX B

ANALYTICAL LABORATORY RESULTS

APPENDIX B1

ANALYTICAL LABORATORY RESULTS
1ST QUARTER MONITORING

ANALYTICAL SUMMARY REPORT

May 16, 2014

Natural Resource Damage Program
1301 E Lockey
Helena, MT 59620-1425

Work Order: H14030371 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 12 samples for Natural Resource Damage Program on 3/26/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14030371-001	SS-01	03/25/14 17:30	03/26/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14030371-002	SS-05A	03/25/14 17:00	03/26/14	Aqueous	Same As Above
H14030371-003	SS-15G	03/24/14 13:45	03/26/14	Aqueous	Same As Above
H14030371-004	SS-01 Sediment Sieve <0.065mm	03/25/14 17:30	03/26/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14030371-005	SS-01 Sediment Sieve 0.065-1mm	03/25/14 17:30	03/26/14	Sediment	Same As Above
H14030371-006	SS-01 Sediment Sieve 1-2mm	03/25/14 17:30	03/26/14	Sediment	Same As Above
H14030371-007	SS-05A Sediment Sieve <0.065mm	03/25/14 17:00	03/26/14	Sediment	Same As Above
H14030371-008	SS-05A Sediment Sieve 0.065-1mm	03/25/14 17:00	03/26/14	Sediment	Same As Above
H14030371-009	SS-05A Sediment Sieve 1-2mm	03/25/14 17:00	03/26/14	Sediment	Same As Above
H14030371-010	SS-15G Sediment Sieve <0.065mm	03/24/14 13:45	03/26/14	Sediment	Same As Above
H14030371-011	SS-15G Sediment Sieve 0.065-1mm	03/24/14 13:45	03/26/14	Sediment	Same As Above
H14030371-012	SS-15G Sediment Sieve 1-2mm	03/24/14 13:45	03/26/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

CLIENT: Natural Resource Damage Program
Project: Silver Bow Creek Monitoring
Work Order: H14030371

Revised Date: 05/16/14
Report Date: 04/18/14

CASE NARRATIVE

Per client request, the reporting limit for Copper on the aqueous samples was changed to 0.001 mg/L. Abb 5/16/14

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14030371-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	03/31/14 10:19 / SR		I24 (14410200)_140331A	16	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	89	mg/L		4		A2320 B	03/27/14 20:54 / SR		MAN-TECH_140327B	64	R95860
Bicarbonate as HCO3	110	mg/L		4		A2320 B	03/27/14 20:54 / SR		MAN-TECH_140327B	64	R95860
Chloride	16	mg/L		1		E300.0	04/01/14 14:30 / abb		IC102-H_140401A	35	R95949
Sulfate	30	mg/L		1		E300.0	04/01/14 14:30 / abb		IC102-H_140401A	35	R95949
Hardness as CaCO3	113	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	2	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	03/31/14 09:50 / cm		FIA203-HE_140331A	32	R95894
Nitrogen, Nitrate+Nitrite as N	0.79	mg/L		0.05		E353.2	03/27/14 13:10 / cm		FIA203-HE_140327A	35	R95844
Nitrogen, Total	1.18	mg/L		0.05		A4500 N-C	03/28/14 13:22 / cm	03/28/14 09:43	FIA203-HE_140328A	23	24004
Phosphorus, Total as P	0.111	mg/L		0.005		E365.1	03/28/14 10:10 / cm	03/28/14 08:23	FIA202-HE_140328A	15	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Arsenic	0.003	mg/L		0.001		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Barium	0.068	mg/L		0.003		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 09:34 / sld		ICP2-HE_140327A	15	R95851
Cadmium	ND	mg/L		0.00003		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Calcium	30	mg/L		1		E200.7	03/27/14 09:34 / sld		ICP2-HE_140327A	15	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Copper	0.003	mg/L		0.001		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Iron	0.15	mg/L		0.02		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Magnesium	8	mg/L		1		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Manganese	0.071	mg/L		0.001		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:01 / sbk	03/27/14 09:26	HGCV202-H_140328B	35	23976

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14030371-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Potassium	4	mg/L		1		E200.7	03/27/14 09:34 / sld		ICP2-HE_140327A	15	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Sodium	11	mg/L		1		E200.7	03/27/14 09:34 / sld		ICP2-HE_140327A	15	R95851
Uranium	0.0037	mg/L		0.0002		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
Zinc	0.015	mg/L		0.008		E200.8	03/28/14 18:53 / dck		ICPMS204-B_140328B	117	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.092	mg/L		0.009		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Arsenic	0.004	mg/L		0.001		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Barium	0.049	mg/L		0.003		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Boron	ND	mg/L		0.1		E200.7	03/31/14 12:51 / sld	03/27/14 07:58	ICP2-HE_140331A	48	23987
Cadmium	0.00012	mg/L		0.00003		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Calcium	32	mg/L		1		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Chromium	ND	mg/L		0.01		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Copper	0.005	mg/L		0.001		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Iron	0.41	mg/L		0.02		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Lead	0.0005	mg/L		0.0003		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Magnesium	8	mg/L		1		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Manganese	0.079	mg/L		0.001		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:05 / sbk	03/27/14 09:26	HGCV202-H_140328B	36	23976
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Nickel	ND	mg/L		0.002		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Potassium	4	mg/L		1		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Selenium	ND	mg/L		0.001		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Silver	0.0003	mg/L		0.0002		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14030371-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	12	mg/L		1		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Uranium	0.0039	mg/L		0.0002		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987
Zinc	0.009	mg/L		0.008		E200.8	03/28/14 18:57 / dck	03/27/14 07:58	ICPMS204-B_140328B	118	23987

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14030371-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	03/31/14 10:20 / SR		I24 (14410200)_140331A	17	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	03/27/14 21:09 / SR		MAN-TECH_140327B	67	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 21:09 / SR		MAN-TECH_140327B	67	R95860
Chloride	23	mg/L		1		E300.0	04/01/14 14:40 / abb		IC102-H_140401A	36	R95949
Sulfate	38	mg/L		1		E300.0	04/01/14 14:40 / abb		IC102-H_140401A	36	R95949
Hardness as CaCO3	125	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	3	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	03/31/14 09:51 / cm		FIA203-HE_140331A	33	R95894
Nitrogen, Nitrate+Nitrite as N	0.93	mg/L		0.05		E353.2	03/27/14 13:11 / cm		FIA203-HE_140327A	36	R95844
Nitrogen, Total	1.29	mg/L		0.05		A4500 N-C	03/28/14 13:23 / cm	03/28/14 09:43	FIA203-HE_140328A	24	24004
Phosphorus, Total as P	0.091	mg/L		0.005		E365.1	03/28/14 10:13 / cm	03/28/14 08:23	FIA202-HE_140328A	18	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Barium	0.058	mg/L		0.003		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 09:56 / sld		ICP2-HE_140327A	21	R95851
Cadmium	0.00007	mg/L		0.00003		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Calcium	36	mg/L		1		E200.7	03/27/14 09:56 / sld		ICP2-HE_140327A	21	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Copper	0.004	mg/L		0.001		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Iron	0.17	mg/L		0.02		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Magnesium	9	mg/L		1		E200.7	03/27/14 09:56 / sld		ICP2-HE_140327A	21	R95851
Manganese	0.103	mg/L		0.001		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:10 / sbk	03/27/14 09:26	HGCV202-H_140328B	37	23976

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14030371-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Potassium	4	mg/L		1		E200.7	03/27/14 09:56 / sld		ICP2-HE_140327A	21	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Sodium	15	mg/L		1		E200.7	03/27/14 09:56 / sld		ICP2-HE_140327A	21	R95851
Uranium	0.0053	mg/L		0.0002		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
Zinc	0.019	mg/L		0.008		E200.8	03/28/14 19:14 / dck		ICPMS204-B_140328B	122	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.081	mg/L		0.009		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Barium	0.051	mg/L		0.003		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Boron	ND	mg/L		0.1		E200.7	03/31/14 13:06 / sld	03/27/14 07:58	ICP2-HE_140331A	52	23987
Cadmium	0.00012	mg/L		0.00003		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Calcium	34	mg/L		1		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Chromium	ND	mg/L		0.01		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Copper	0.007	mg/L		0.001		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Iron	0.41	mg/L		0.02		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Lead	0.0013	mg/L		0.0003		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Magnesium	10	mg/L		1		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Manganese	0.111	mg/L		0.001		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:14 / sbk	03/27/14 09:26	HGCV202-H_140328B	38	23976
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Nickel	ND	mg/L		0.002		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Potassium	4	mg/L		1		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Selenium	ND	mg/L		0.001		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Silver	0.0002	mg/L		0.0002		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14030371-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	16	mg/L		1		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Uranium	0.0057	mg/L		0.0002		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987
Zinc	0.024	mg/L		0.008		E200.8	03/28/14 19:18 / dck	03/27/14 07:58	ICPMS204-B_140328B	123	23987

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14030371-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
Report Date: 04/18/14
DateReceived: 03/26/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	5	mg/L		1		A2540 D	03/31/14 10:20 / SR		I24 (14410200)_140331A	18	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	94	mg/L		4		A2320 B	03/27/14 21:16 / SR		MAN-TECH_140327B	68	R95860
Bicarbonate as HCO3	120	mg/L		4		A2320 B	03/27/14 21:16 / SR		MAN-TECH_140327B	68	R95860
Chloride	2	mg/L		1		E300.0	03/27/14 20:11 / abb		IC102-H_140327A	63	R95852
Sulfate	37	mg/L		1		E300.0	03/27/14 20:11 / abb		IC102-H_140327A	63	R95852
Hardness as CaCO3	106	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	4	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	03/31/14 09:53 / cm		FIA203-HE_140331A	34	R95894
Nitrogen, Nitrate+Nitrite as N	0.08	mg/L		0.05		E353.2	03/27/14 13:13 / cm		FIA203-HE_140327A	37	R95844
Nitrogen, Total	0.17	mg/L		0.05		A4500 N-C	04/01/14 14:02 / cm	04/01/14 09:17	FIA203-HE_140401B	13	24037
Phosphorus, Total as P	0.048	mg/L		0.005		E365.1	03/28/14 10:14 / cm	03/28/14 08:23	FIA202-HE_140328A	19	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Arsenic	0.004	mg/L		0.001		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Barium	0.035	mg/L		0.003		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:00 / sld		ICP2-HE_140327A	22	R95851
Cadmium	ND	mg/L		0.00003		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Calcium	35	mg/L		1		E200.7	03/27/14 10:00 / sld		ICP2-HE_140327A	22	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Copper	ND	mg/L		0.001		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Iron	ND	mg/L		0.02		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Magnesium	6	mg/L		1		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Manganese	0.002	mg/L		0.001		E200.8	04/01/14 17:56 / dck		ICPMS204-B_140401B	27	R95960
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:18 / sbk	03/27/14 09:27	HGCV202-H_140328B	39	23976

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14030371-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Potassium	2	mg/L		1		E200.7	03/27/14 10:00 / sld		ICP2-HE_140327A	22	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Sodium	5	mg/L		1		E200.7	03/27/14 10:00 / sld		ICP2-HE_140327A	22	R95851
Uranium	0.0012	mg/L		0.0002		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
Zinc	0.009	mg/L		0.008		E200.8	03/28/14 19:23 / dck		ICPMS204-B_140328B	124	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.168	mg/L		0.009		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Arsenic	0.004	mg/L		0.001		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Barium	0.024	mg/L		0.003		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Boron	ND	mg/L		0.1		E200.7	03/31/14 13:09 / sld	03/27/14 07:58	ICP2-HE_140331A	53	23987
Cadmium	0.00003	mg/L		0.00003		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Calcium	32	mg/L		1		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Chromium	ND	mg/L		0.01		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Copper	0.001	mg/L		0.001		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Iron	0.16	mg/L		0.02		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Lead	ND	mg/L		0.0003		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Magnesium	6	mg/L		1		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Manganese	0.011	mg/L		0.001		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:31 / sbk	03/27/14 09:45	HGCV202-H_140328B	42	23976
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Nickel	ND	mg/L		0.002		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Potassium	2	mg/L		1		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Selenium	ND	mg/L		0.001		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987
Silver	ND	mg/L		0.0002		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	125	23987

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14030371-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	5	mg/L		1		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 125	23987
Uranium	0.0013	mg/L		0.0002		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 125	23987
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 125	23987
Zinc	ND	mg/L		0.008		E200.8	03/28/14 19:27 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 125	23987

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14030371-004
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.1	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	1	R96065
PHYSICAL CHARACTERISTICS											
Moisture	51.9	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404A	1	R96228
3050 EXTRACTABLE METALS											
Aluminum	10600	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	156	24079
Arsenic	17	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Barium	113	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Cadmium	0.9	mg/kg		0.2		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	156	24079
Chromium	16	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Copper	145	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Iron	12800	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Lead	59	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Manganese	407	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Molybdenum	6	mg/kg		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	156	24079
Nickel	8	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	156	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	156	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	156	24079
Vanadium	36	mg/kg		1		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
Zinc	145	mg/kg		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:47	ICP2-HE_140407B	20	24079
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 11:43 / sbk	04/07/14 08:31	HGCV201-H_140409A	49	24097
METAL, DRY WEIGHT											
Aluminum	22000	mg/kg-dry		7		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14030371-004
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	195	24079
Arsenic	35	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Barium	235	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Boron	10	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Cadmium	1.9	mg/kg-dry		0.3		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	195	24079
Chromium	34	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Copper	302	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Iron	26500	mg/kg-dry		6		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Lead	123	mg/kg-dry		7		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Manganese	845	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Molybdenum	13	mg/kg-dry		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	195	24079
Nickel	17	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	195	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	195	24079
Uranium	7	mg/kg-dry		5		SW6020	04/08/14 01:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	195	24079
Vanadium	75	mg/kg-dry		2		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Zinc	301	mg/kg-dry		5		SW6010B	04/07/14 11:52 / sld	04/03/14 15:44	ICP2-HE_140407B	86	24079
Mercury	0.16	mg/kg-dry		0.10		SW7471B	04/09/14 11:43 / sbk	04/07/14 08:31	HGCV201-H_140409A	183	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14030371-005
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	57.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	: 2	R96065
PHYSICAL CHARACTERISTICS											
Moisture	16.9	wt%		0.2		D2974	04/14/14 10:45 / raw		)RYING OVEN 2_140404A	: 3	R96228
3050 EXTRACTABLE METALS											
Aluminum	2870	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Arsenic	10	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Barium	39	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Cadmium	ND	mg/kg		0.2		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Chromium	7	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Copper	30	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Iron	7260	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Lead	13	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Manganese	127	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
Vanadium	20	mg/kg		1		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 22	24078
Zinc	106	mg/kg		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 52	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 11:46 / sbk	04/07/14 08:31	HGCV201-H_140409A	: 50	24097
METAL, DRY WEIGHT											
Aluminum	3450	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	: 106	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14030371-005
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Arsenic	12	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Barium	47	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Cadmium	0.2	mg/kg-dry		0.2		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Chromium	8	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Copper	36	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Iron	8740	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Lead	15	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Manganese	153	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Vanadium	24	mg/kg-dry		1		SW6010B	04/08/14 14:01 / sld	04/03/14 15:44	ICP2-HE_140408C	106	24078
Zinc	127	mg/kg-dry		5		SW6020	04/10/14 20:53 / dck	04/03/14 15:44	ICPMS204-B_140411A	251	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 11:46 / sbk	04/07/14 08:31	HGCV201-H_140409A	184	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14030371-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	17.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331	A : 3	R96065
PHYSICAL CHARACTERISTICS											
Moisture	17.9	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404	A : 4	R96228
3050 EXTRACTABLE METALS											
Aluminum	2640	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Arsenic	ND	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Barium	38	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Cadmium	ND	mg/kg		0.2		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Chromium	5	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Copper	16	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Iron	4560	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Lead	8	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Manganese	106	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 115	24077
Vanadium	10	mg/kg		1		SW6010B	04/08/14 16:25 / sld	04/03/14 15:42	ICP2-HE_140408	C : 61	24077
Zinc	26	mg/kg		5		SW6010B	04/16/14 18:21 / sld	04/15/14 07:32	ICP2-HE_140416	D : 29	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 11:53 / sbk	04/07/14 08:31	HGCV201-H_140409	A : 53	24097
METAL, DRY WEIGHT											
Aluminum	3210	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408	C : 145	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14030371-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:30
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Arsenic	ND	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Barium	47	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Cadmium	0.2	mg/kg-dry		0.2		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Chromium	6	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Copper	20	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Iron	5560	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Lead	10	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Manganese	129	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 00:54 / dck	04/03/14 15:42	ICPMS204-B_140408B	150	24077
Vanadium	12	mg/kg-dry		1		SW6010B	04/08/14 16:25 / sld	04/03/14 15:39	ICP2-HE_140408C	145	24077
Zinc	32	mg/kg-dry		5		SW6010B	04/16/14 18:21 / sld	04/15/14 07:32	ICP2-HE_140416D	116	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 11:53 / sbk	04/07/14 08:31	HGCV201-H_140409A	187	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14030371-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.2	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	4	R96065
PHYSICAL CHARACTERISTICS											
Moisture	54.2	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404A	5	R96228
3050 EXTRACTABLE METALS											
Aluminum	8910	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	157	24079
Arsenic	95	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Barium	167	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Boron	6	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Cadmium	7.1	mg/kg		0.2		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Chromium	44	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Copper	1010	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Iron	18400	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Lead	389	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Manganese	832	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Molybdenum	8	mg/kg		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	157	24079
Nickel	19	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	157	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	157	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	157	24079
Vanadium	45	mg/kg		1		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
Zinc	1480	mg/kg		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:47	ICP2-HE_140407B	21	24079
METALS, TOTAL											
Mercury	0.43	mg/kg		0.10		SW7471B	04/09/14 15:09 / sbk	04/07/14 08:31	HGCV201-H_140409A	129	24097
METAL, DRY WEIGHT											
Aluminum	19400	mg/kg-dry		7		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14030371-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	196	24079
Arsenic	208	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Barium	364	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Boron	13	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Cadmium	15.4	mg/kg-dry		0.2		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Chromium	97	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Cobalt	7	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Copper	2210	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Iron	40100	mg/kg-dry		6		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Lead	848	mg/kg-dry		6		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Manganese	1820	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Molybdenum	18	mg/kg-dry		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	196	24079
Nickel	42	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	196	24079
Silver	10	mg/kg-dry		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	196	24079
Uranium	10	mg/kg-dry		5		SW6020	04/08/14 01:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	196	24079
Vanadium	99	mg/kg-dry		1		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Zinc	3220	mg/kg-dry		5		SW6010B	04/07/14 11:55 / sld	04/03/14 15:44	ICP2-HE_140407B	87	24079
Mercury	0.94	mg/kg-dry		0.10		SW7471B	04/09/14 15:09 / sbk	04/07/14 08:31	HGCV201-H_140409A	263	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14030371-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	46.2	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	5	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.3	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404A	6	R96228
3050 EXTRACTABLE METALS											
Aluminum	3620	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Arsenic	47	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Barium	57	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Cadmium	2.2	mg/kg		0.2		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Chromium	18	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Cobalt	7	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Copper	390	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Iron	34600	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Lead	129	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Manganese	531	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Nickel	7	mg/kg		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
Vanadium	50	mg/kg		1		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	25	24078
Zinc	878	mg/kg		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	53	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:16 / sbk	04/07/14 08:31	HGCV201-H_140409A	59	24097
METAL, DRY WEIGHT											
Aluminum	4600	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14030371-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Arsenic	60	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Barium	72	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Cadmium	2.8	mg/kg-dry		0.2		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Chromium	23	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Cobalt	8	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Copper	496	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Iron	43900	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Lead	164	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Manganese	675	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Nickel	9	mg/kg-dry		5		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Vanadium	64	mg/kg-dry		1		SW6010B	04/08/14 14:12 / sld	04/03/14 15:44	ICP2-HE_140408C	109	24078
Zinc	1120	mg/kg-dry		5		SW6020	04/10/14 20:57 / dck	04/03/14 15:44	ICPMS204-B_140411A	252	24078
Mercury	0.10	mg/kg-dry		0.10		SW7471B	04/09/14 12:16 / sbk	04/07/14 08:31	HGCV201-H_140409A	193	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14030371-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	24.5	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	6	R96065
PHYSICAL CHARACTERISTICS											
Moisture	16.3	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404A	7	R96228
3050 EXTRACTABLE METALS											
Aluminum	3140	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	116	24077
Arsenic	56	mg/kg		5		SW6010B	04/11/14 16:45 / sld	04/09/14 14:37	ICP2-HE_140411A	52	24149
Barium	68	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Cadmium	1.1	mg/kg		0.2		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	116	24077
Chromium	7	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Copper	196	mg/kg		5		SW6010B	04/16/14 18:24 / sld	04/15/14 07:32	ICP2-HE_140416D	30	24203
Iron	9110	mg/kg		5		SW6010B	04/16/14 18:24 / sld	04/15/14 07:32	ICP2-HE_140416D	30	24203
Lead	79	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Manganese	258	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	116	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	116	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	116	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	116	24077
Vanadium	12	mg/kg		1		SW6010B	04/08/14 16:28 / sld	04/03/14 15:42	ICP2-HE_140408C	62	24077
Zinc	526	mg/kg		5		SW6010B	04/16/14 18:24 / sld	04/15/14 07:32	ICP2-HE_140416D	30	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:18 / sbk	04/07/14 08:31	HGCV201-H_140409A	60	24097
METAL, DRY WEIGHT											
Aluminum	3750	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14030371-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 17:00
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	151	24077
Arsenic	67	mg/kg-dry		5		SW6010B	04/11/14 16:45 / sld	04/09/14 14:37	ICP2-HE_140411A	179	24149
Barium	81	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Cadmium	1.3	mg/kg-dry		0.2		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	151	24077
Chromium	8	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Copper	234	mg/kg-dry		5		SW6010B	04/16/14 18:24 / sld	04/15/14 07:32	ICP2-HE_140416D	117	24203
Iron	10900	mg/kg-dry		5		SW6010B	04/16/14 18:24 / sld	04/15/14 07:32	ICP2-HE_140416D	117	24203
Lead	95	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Manganese	309	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	151	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	151	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	151	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 00:59 / dck	04/03/14 15:42	ICPMS204-B_140408B	151	24077
Vanadium	14	mg/kg-dry		1		SW6010B	04/08/14 16:28 / sld	04/03/14 15:39	ICP2-HE_140408C	146	24077
Zinc	629	mg/kg-dry		5		SW6010B	04/16/14 18:24 / sld	04/15/14 07:32	ICP2-HE_140416D	117	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 12:18 / sbk	04/07/14 08:31	HGCV201-H_140409A	194	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve <0.065mm
Lab ID: H14030371-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.6	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	: 7	R96065
PHYSICAL CHARACTERISTICS											
Moisture	69.9	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404A	: 8	R96228
3050 EXTRACTABLE METALS											
Aluminum	7070	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Arsenic	11	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Barium	59	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Cadmium	0.4	mg/kg		0.2		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Chromium	9	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Copper	25	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Iron	5460	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Lead	15	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Manganese	211	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Nickel	5	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	: 158	24079
Vanadium	12	mg/kg		1		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
Zinc	30	mg/kg		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:47	ICP2-HE_140407B	: 22	24079
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:20 / sbk	04/07/14 08:31	HGCV201-H_140409A	: 61	24097
METAL, DRY WEIGHT											
Aluminum	23500	mg/kg-dry		10		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	: 88	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve <0.065mm
Lab ID: H14030371-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Arsenic	35	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Barium	196	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Boron	12	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Cadmium	1.4	mg/kg-dry		0.5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Chromium	30	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Copper	83	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Iron	18200	mg/kg-dry		10		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Lead	51	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Manganese	699	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Nickel	18	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 01:54 / dck	04/03/14 15:47	ICPMS204-B_140407B	197	24079
Vanadium	40	mg/kg-dry		2		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Zinc	100	mg/kg-dry		5		SW6010B	04/07/14 11:59 / sld	04/03/14 15:44	ICP2-HE_140407B	88	24079
Mercury	0.24	mg/kg-dry		0.10		SW7471B	04/09/14 12:20 / sbk	04/07/14 08:31	HGCV201-H_140409A	195	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 0.065-1mm
Lab ID: H14030371-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	33.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	: 8	R96065
PHYSICAL CHARACTERISTICS											
Moisture	27.4	wt%		0.2		D2974	04/14/14 10:45 / raw		DRYING OVEN 2_140404A	: 9	R96228
3050 EXTRACTABLE METALS											
Aluminum	6070	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Arsenic	15	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Barium	97	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Cadmium	ND	mg/kg		0.2		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Chromium	13	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Copper	17	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Iron	14000	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Lead	7	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Manganese	116	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Nickel	5	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	: 54	24078
Vanadium	41	mg/kg		1		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
Zinc	24	mg/kg		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 26	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:23 / sbk	04/07/14 08:31	HGCV201-H_140409A	: 62	24097
METAL, DRY WEIGHT											
Aluminum	8370	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	: 110	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 0.065-1mm
Lab ID: H14030371-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Arsenic	20	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Barium	134	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Cadmium	ND	mg/kg-dry		0.2		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Chromium	18	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Copper	23	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Iron	19300	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Lead	10	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Manganese	160	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Nickel	7	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:01 / dck	04/03/14 15:44	ICPMS204-B_140411A	253	24078
Vanadium	57	mg/kg-dry		1		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Zinc	33	mg/kg-dry		5		SW6010B	04/08/14 14:16 / sld	04/03/14 15:44	ICP2-HE_140408C	110	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 12:23 / sbk	04/07/14 08:31	HGCV201-H_140409A	196	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 1-2mm
Lab ID: H14030371-012
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	9.3	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331	A : 9	R96065
PHYSICAL CHARACTERISTICS											
Moisture	23.3	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404	A : 10	R96228
3050 EXTRACTABLE METALS											
Aluminum	7280	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Arsenic	16	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Barium	81	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Cadmium	ND	mg/kg		0.2		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Chromium	11	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Copper	20	mg/kg		5		SW6010B	04/16/14 18:35 / sld	04/15/14 07:32	ICP2-HE_140416	D : 33	24203
Iron	9870	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Lead	7	mg/kg		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Manganese	111	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Nickel	7	mg/kg		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408	B : 117	24077
Vanadium	19	mg/kg		1		SW6010B	04/08/14 16:32 / sld	04/03/14 15:42	ICP2-HE_140408	C : 63	24077
Zinc	64	mg/kg		5		SW6010B	04/16/14 18:35 / sld	04/15/14 07:32	ICP2-HE_140416	D : 33	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:25 / sbk	04/07/14 08:31	HGCV201-H_140409	A : 63	24097
METAL, DRY WEIGHT											
Aluminum	9500	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408	C : 147	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 1-2mm
Lab ID: H14030371-012
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:45
DateReceived: 03/26/14
Report Date: 04/18/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Arsenic	21	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Barium	106	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Cadmium	0.2	mg/kg-dry		0.2		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Chromium	15	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Copper	26	mg/kg-dry		5		SW6010B	04/16/14 18:35 / sld	04/15/14 07:32	ICP2-HE_140416D	120	24203
Iron	12900	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Lead	9	mg/kg-dry		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Manganese	145	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Nickel	9	mg/kg-dry		5		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:03 / dck	04/03/14 15:42	ICPMS204-B_140408B	152	24077
Vanadium	25	mg/kg-dry		1		SW6010B	04/08/14 16:32 / sld	04/03/14 15:39	ICP2-HE_140408C	147	24077
Zinc	83	mg/kg-dry		5		SW6010B	04/16/14 18:35 / sld	04/15/14 07:32	ICP2-HE_140416D	120	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 12:25 / sbk	04/07/14 08:31	HGCV201-H_140409A	197	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140328wa

Date: *18-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **03/28/14 09:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **HGCV202-H_140328B: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **03/28/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		97	95	105				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **HGCV202-H_140328B: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **03/28/14 11:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		101	90	110				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140409sa

Date: *18-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**
Analysis Date: **04/09/14 09:49** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00092	0.50	0.001		92	90	110				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-007A; H14030371-007B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-010A; H14030371-010B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **HGCV201-H_140409A: 33** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 11:05** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		104	90	110				

Associated samples: **H14030371-004A; H14030371-005A**

Run ID :Run Order: **HGCV201-H_140409A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 11:48** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		104	90	110				

Associated samples: **H14030371-006A; H14030371-008A; H14030371-009A; H14030371-010A; H14030371-011A; H14030371-012A**

Run ID :Run Order: **HGCV201-H_140409A: 127** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 15:03** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		106	90	110				

Associated samples: **H14030371-007A**

Run ID :Run Order: **HGCV201-H_140409A: 133** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 15:18** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		105	90	110				

Associated samples:

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23976

Date: *18-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 33** SampType: **Method Blank** Lab ID: **MB-23976** Method: **E245.1**
Analysis Date: **03/28/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: **3/26/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	3E-06									

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **HGCV202-H_140328B: 34** SampType: **Laboratory Control Sample** Lab ID: **LCS-23976** Method: **E245.1**
Analysis Date: **03/28/14 11:57** Units: **mg/L** **Prep Info:** Prep Date: **3/26/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015		102	90	110				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **HGCV202-H_140328B: 40** SampType: **Sample Matrix Spike** Lab ID: **H14030371-003BMS** Method: **E245.1**
Analysis Date: **03/28/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		107	70	130				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **HGCV202-H_140328B: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-003BMSD** Method: **E245.1**
Analysis Date: **03/28/14 12:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		108	70	130	0.0001605	0.8	20	

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23987

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140331A: 46** SampType: **Method Blank** Lab ID: **MB-23987** Method: **E200.7**
Analysis Date: **03/31/14 12:43** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 47** SampType: **Laboratory Control Sample** Lab ID: **LCS-23987** Method: **E200.7**
Analysis Date: **03/31/14 12:47** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.511	0.050	0.5		102	85	115				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 49** SampType: **Serial Dilution** Lab ID: **H14030371-001CDIL** Method: **E200.7**
Analysis Date: **03/31/14 12:55** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.0308	0.050				0	0	0.02037		10	N

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 50** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001CMS3** Method: **E200.7**
Analysis Date: **03/31/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.521	0.050	0.5	0.02037	100	70	130				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001CMSD3** Method: **E200.7**
Analysis Date: **03/31/14 13:02** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.567	0.050	0.5	0.02037	109	70	130	0.5205	8.5	20	

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23987

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 43** SampType: **Method Blank** Lab ID: **MB-23987** Method: **E200.8**

Analysis Date: **03/28/14 13:21** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.005	0.0006									
Antimony	5E-05	3E-05									
Arsenic	ND	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Cadmium	ND	3E-05									
Calcium	ND	0.02									
Chromium	0.0001	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.002	0.002									
Lead	ND	3E-05									
Magnesium	ND	0.002									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									
Selenium	ND	0.0002									
Silver	ND	7E-05									
Sodium	0.04	0.03									
Uranium	ND	3E-05									
Vanadium	0.0001	7E-05									
Zinc	0.005	0.001									

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 44** SampType: **Laboratory Control Sample** Lab ID: **LCS-23987** Method: **E200.8**

Analysis Date: **03/28/14 13:25** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.50	0.030	2.5	0.004858	100	85	115				
Antimony	0.487	0.0010	0.5	0.0000545	97	85	115				
Arsenic	0.511	0.0010	0.5		102	85	115				
Barium	0.458	0.050	0.5		92	85	115				
Beryllium	0.257	0.0010	0.25		103	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23987

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 44** SampType: **Laboratory Control Sample** Lab ID: **LCS-23987** Method: **E200.8**

Analysis Date: **03/28/14 13:25** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.224	0.0010	0.25		90	85	115				
Calcium	27.6	1.0	25		110	85	115				
Chromium	0.481	0.0050	0.5	0.0001036	96	85	115				
Cobalt	0.492	0.0050	0.5		98	85	115				
Copper	0.468	0.0050	0.5		94	85	115				
Iron	2.50	0.020	2.5	0.00224	100	85	115				
Lead	0.475	0.0010	0.5		95	85	115				
Magnesium	26.1	1.0	25		104	85	115				
Manganese	2.56	0.0010	2.5		103	85	115				
Molybdenum	0.509	0.0010	0.5		102	85	115				
Nickel	0.521	0.0050	0.5		104	85	115				
Potassium	26.2	1.0	25		105	85	115				
Selenium	0.525	0.0010	0.5		105	85	115				
Silver	0.0497	0.0010	0.05		99	85	115				
Sodium	26.2	1.0	25	0.04143	105	85	115				
Uranium	0.499	0.00030	0.5		100	85	115				
Vanadium	0.479	0.010	0.5	0.0001377	96	85	115				
Zinc	0.506	0.010	0.5	0.004841	100	85	115				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 119** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001CMS3** Method: **E200.8**

Analysis Date: **03/28/14 19:02** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.52	0.030	2.5	0.09236	97	70	130				
Antimony	0.490	0.0010	0.5	0.0002759	98	70	130				
Arsenic	0.518	0.0010	0.5	0.003695	103	70	130				
Barium	0.501	0.050	0.5	0.04942	90	70	130				
Beryllium	0.242	0.0010	0.25		97	70	130				
Cadmium	0.230	0.0010	0.25	0.0001219	92	70	130				
Calcium	53.9	1.0	25	31.66	89	70	130				
Chromium	0.470	0.0050	0.5	0.0003468	94	70	130				
Cobalt	0.480	0.0050	0.5	0.0002102	96	70	130				
Copper	0.465	0.0050	0.5	0.004649	92	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23987

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 119** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001CMS3** Method: **E200.8**

Analysis Date: **03/28/14 19:02** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	2.96	0.020	2.5	0.4055	102	70	130				
Lead	0.473	0.0010	0.5	0.0005317	94	70	130				
Magnesium	33.8	1.0	25	8.276	102	70	130				
Manganese	2.59	0.0010	2.5	0.07857	100	70	130				
Molybdenum	0.509	0.0010	0.5	0.004891	101	70	130				
Nickel	0.501	0.0050	0.5		100	70	130				
Potassium	29.5	1.0	25	3.854	102	70	130				
Selenium	0.531	0.0010	0.5		106	70	130				
Silver	0.0502	0.0010	0.05	0.0002652	100	70	130				
Sodium	37.1	1.0	25	11.98	101	70	130				
Uranium	0.518	0.00030	0.5	0.003851	103	70	130				
Vanadium	0.477	0.010	0.5	0.002825	95	70	130				
Zinc	0.511	0.010	0.5	0.009267	100	70	130				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 120** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001CMSD3** Method: **E200.8**

Analysis Date: **03/28/14 19:06** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.53	0.030	2.5	0.09236	97	70	130	2.516	0.5	20	
Antimony	0.491	0.0010	0.5	0.0002759	98	70	130	0.4902	0.1	20	
Arsenic	0.514	0.0010	0.5	0.003695	102	70	130	0.5178	0.7	20	
Barium	0.495	0.050	0.5	0.04942	89	70	130	0.5012	1.2	20	
Beryllium	0.242	0.0010	0.25		97	70	130	0.2418	0.3	20	
Cadmium	0.232	0.0010	0.25	0.0001219	93	70	130	0.2301	1.0	20	
Calcium	54.3	1.0	25	31.66	91	70	130	53.88	0.8	20	
Chromium	0.475	0.0050	0.5	0.0003468	95	70	130	0.4705	1.0	20	
Cobalt	0.482	0.0050	0.5	0.0002102	96	70	130	0.4795	0.5	20	
Copper	0.459	0.0050	0.5	0.004649	91	70	130	0.4649	1.3	20	
Iron	2.96	0.020	2.5	0.4055	102	70	130	2.965	0.0	20	
Lead	0.473	0.0010	0.5	0.0005317	95	70	130	0.4728	0.1	20	
Magnesium	34.0	1.0	25	8.276	103	70	130	33.8	0.5	20	
Manganese	2.60	0.0010	2.5	0.07857	101	70	130	2.586	0.4	20	
Molybdenum	0.500	0.0010	0.5	0.004891	99	70	130	0.5088	1.7	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23987

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 120** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001CMSD3** Method: **E200.8**

Analysis Date: **03/28/14 19:06** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.500	0.0050	0.5		**100**	70	130	0.5008	**0.1**	20	
Potassium	29.6	1.0	25	3.854	**103**	70	130	29.46	**0.3**	20	
Selenium	0.525	0.0010	0.5		**105**	70	130	0.5308	**1.1**	20	
Silver	0.0497	0.0010	0.05	0.0002652	**99**	70	130	0.05021	**1.1**	20	
Sodium	37.8	1.0	25	11.98	**103**	70	130	37.11	**1.8**	20	
Uranium	0.529	0.00030	0.5	0.003851	**105**	70	130	0.5181	**2.1**	20	
Vanadium	0.476	0.010	0.5	0.002825	**95**	70	130	0.4769	**0.2**	20	
Zinc	0.506	0.010	0.5	0.009267	**99**	70	130	0.511	**0.9**	20	

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23999

Date: *18-Apr-14*

Run ID :Run Order: **FIA202-HE_140328A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-23999** Method: **E365.1**
Analysis Date: **03/28/14 10:06** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.206	0.010	0.2		103	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA202-HE_140328A: 12** SampType: **Method Blank** Lab ID: **MB-23999** Method: **E365.1**
Analysis Date: **03/28/14 10:07** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA202-HE_140328A: 16** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001DMS** Method: **E365.1**
Analysis Date: **03/28/14 10:11** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.195	0.010	0.1	0.111	84	90	110				S

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA202-HE_140328A: 17** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001DMSD** Method: **E365.1**
Analysis Date: **03/28/14 10:12** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.191	0.010	0.1	0.111	80	90	110	0.1948	2.0	20	S

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24004

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140328A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24004** Method: **A4500 N-C**
Analysis Date: **03/28/14 13:07** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	17.0	0.30	18.7		91	90	110				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **FIA203-HE_140328A: 12** SampType: **Method Blank** Lab ID: **MB-24004** Method: **A4500 N-C**
Analysis Date: **03/28/14 13:09** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **FIA203-HE_140328A: 14** SampType: **Sample Matrix Spike** Lab ID: **H14030285-001AMS** Method: **A4500 N-C**
Analysis Date: **03/28/14 13:11** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.65	0.10	1	0.6969	96	90	110				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **FIA203-HE_140328A: 15** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030285-001AMSD** Method: **A4500 N-C**
Analysis Date: **03/28/14 13:12** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.77	0.10	1	0.6969	107	90	110	1.653	6.7	20	

Associated samples: **H14030371-001A; H14030371-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24037

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140401B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24037** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:00** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	18.0	0.30	18.7		96	90	110				

Associated samples: **H14030371-003A**

Run ID :Run Order: **FIA203-HE_140401B: 12** SampType: **Method Blank** Lab ID: **MB-24037** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:01** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14030371-003A**

Run ID :Run Order: **FIA203-HE_140401B: 18** SampType: **Sample Matrix Spike** Lab ID: **H14030374-005AMS** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:08** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.02	0.10	1	0.0263	99	90	110				

Associated samples: **H14030371-003A**

Run ID :Run Order: **FIA203-HE_140401B: 19** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-005AMSD** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:09** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.00	0.10	1	0.0263	98	90	110	1.018	1.4	20	

Associated samples: **H14030371-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 58** SampType: **Method Blank** Lab ID: **MB-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.6	0.3									
Arsenic	ND	0.4									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	ND	0.2									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Lead	ND	0.6									
Manganese	0.08	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140408C: 59** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:18** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	242	5.0	250	0.558	97	80	120				
Arsenic	45.3	1.0	50		91	80	120				
Barium	49.0	1.0	50		98	80	120				
Beryllium	24.0	1.0	25		96	80	120				
Boron	44.2	1.0	50		88	80	120				
Chromium	47.8	1.0	50		96	80	120				
Cobalt	44.6	1.0	50		89	80	120				
Copper	47.7	1.0	50		95	80	120				
Iron	235	5.0	250	11.57	90	80	120				
Lead	44.2	1.0	50		88	80	120				
Manganese	233	1.0	250	0.078	93	80	120				
Nickel	46.3	1.0	50		93	80	120				
Vanadium	47.3	1.0	50		95	80	120				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 60** SampType: **Laboratory Control Sample** Lab ID: **LCS-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:21** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12100	5.0	14640	0.558	82	50.7	131.3				
Arsenic	250	1.8	341.6		73	72.3	106.4				
Barium	532	1.0	611.6		87	80.6	112.2				
Beryllium	42.0	1.0	50.8		83	76.3	108.6				
Boron	65.6	1.0	92.83		71	59.4	101.9				
Chromium	64.5	1.0	75.7		85	72.8	109.1				
Cobalt	43.5	1.0	57.17		76	73.3	103.7				
Copper	240	1.1	278.9		86	77.5	109.6				
Iron	17600	5.0	22910	11.57	77	39.6	138.3				
Lead	153	3.2	186.3		82	75.9	108.6				
Manganese	354	1.0	367.5	0.078	96	80.8	115.7				
Nickel	48.4	1.0	60.76		80	72.3	103.4				
Vanadium	57.7	1.0	72.71		79	66.6	107.3				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140408C: 83** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**

Analysis Date: **04/08/14 17:46** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2720	16				0	0	2661	2.4	10	
Arsenic	14.6	8.7				0	0	15.64		10	N
Barium	51.8	1.0				0	0	50.55	2.4	10	
Beryllium	ND	1.0				0	0	0.1667		10	
Boron	ND	2.5				0	0			10	
Chromium	10.9	1.5				0	0	6.925		10	N
Cobalt	2.75	2.7				0	0	2.645		10	N
Copper	72.1	5.3				0	0	74.92	3.8	10	
Iron	7240	14				0	0	7071	2.4	10	
Lead	29.5	15				0	0	31.83		10	N
Manganese	347	1.0				0	0	337.3	2.7	10	
Nickel	2.87	1.7				0	0	3.511		10	N
Vanadium	13.3	3.6				0	0	15.74		10	N

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 84** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-063APDS** Method: **SW6010B**

Analysis Date: **04/08/14 17:49** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3820	5.0	1240	2661	93	75	125				
Arsenic	244	1.8	248.1	15.64	92	75	125				
Barium	282	1.0	248.1	50.55	93	75	125				
Beryllium	115	1.0	124	0.1667	92	75	125				
Boron	222	1.0	248.1		90	75	125				
Chromium	244	1.0	248.1	6.925	96	75	125				
Cobalt	227	1.0	248.1	2.645	90	75	125				
Copper	300	1.1	248.1	74.92	91	75	125				
Iron	8010	5.0	1240	7071		75	125				A
Lead	254	3.2	248.1	31.83	89	75	125				
Manganese	1460	1.0	1240	337.3	90	75	125				
Nickel	236	1.0	248.1	3.511	94	75	125				
Vanadium	243	1.0	248.1	15.74	92	75	125				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140408C: 85** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6010B**

Analysis Date: **04/08/14 17:53** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3930	5.0	243.7	2661		75	125				A
Arsenic	57.6	1.8	48.73	15.64	86	75	125				
Barium	96.2	1.0	48.73	50.55	94	75	125				
Beryllium	24.0	1.0	24.37	0.1667	98	75	125				
Boron	46.0	1.0	48.73		94	75	125				
Chromium	55.4	1.0	48.73	6.925	100	75	125				
Cobalt	47.9	1.0	48.73	2.645	93	75	125				
Copper	82.6	1.1	48.73	74.92	16	75	125				S
Iron	6720	5.0	243.7	7071		75	125				A
Lead	61.9	3.1	48.73	31.83	62	75	125				S
Manganese	500	1.0	243.7	337.3	67	75	125				S
Nickel	51.2	1.0	48.73	3.511	98	75	125				
Vanadium	64.3	1.0	48.73	15.74	100	75	125				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 86** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/08/14 17:57** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3660	5.0	240.8	2661		75	125	3928	7.1	20	A
Arsenic	56.3	1.7	48.17	15.64	84	75	125	57.62	2.3	20	
Barium	90.7	1.0	48.17	50.55	83	75	125	96.2	5.9	20	
Beryllium	23.8	1.0	24.08	0.1667	98	75	125	24	1.0	20	
Boron	45.0	1.0	48.17		93	75	125	45.96	2.2	20	
Chromium	54.6	1.0	48.17	6.925	99	75	125	55.42	1.4	20	
Cobalt	46.8	1.0	48.17	2.645	92	75	125	47.92	2.3	20	
Copper	88.8	1.1	48.17	74.92	29	75	125	82.63	7.2	20	S
Iron	6540	5.0	240.8	7071		75	125	6722	2.8	20	A
Lead	61.1	3.1	48.17	31.83	61	75	125	61.94	1.4	20	S
Manganese	499	1.0	240.8	337.3	67	75	125	500	0.3	20	S
Nickel	49.7	1.0	48.17	3.511	96	75	125	51.17	2.9	20	
Vanadium	65.0	1.0	48.17	15.74	102	75	125	64.27	1.1	20	

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 111** SampType: **Method Blank** Lab ID: **MB-24077** Method: **SW6020**
Analysis Date: **04/09/14 00:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.3	0.3									
Uranium	ND	0.2									

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICPMS204-B_140408B: 112** SampType: **Laboratory Control Sample** Lab ID: **LCS-24077** Method: **SW6020**
Analysis Date: **04/09/14 00:41** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	43.5	1.0	125.5		**35**	2.2	92.9				
Arsenic	304	1.0	341.6		**89**	72.3	106.4				
Cadmium	124	1.0	136.5		**91**	73	105.1				
Lead	187	1.0	186.3		**100**	75.9	108.6				
Molybdenum	150	1.0	171.3		**87**	68.6	105.8				
Selenium	191	1.0	195.2		**98**	72.5	112.2				
Silver	61.9	1.0	68.73	0.2865	**90**	67.8	112.8				
Uranium	115	1.0	99.6		**115**	80	120				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICPMS204-B_140408B: 113** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6020**
Analysis Date: **04/09/14 00:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.6	1.0	50		**99**	80	120				
Arsenic	50.6	1.0	50		**101**	80	120				
Cadmium	25.7	1.0	25		**103**	80	120				
Lead	50.6	1.0	50		**101**	80	120				
Molybdenum	50.3	1.0	50		**101**	80	120				
Selenium	51.4	1.0	50		**103**	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 113** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6020**
Analysis Date: **04/09/14 00:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	24.9	1.0	25	0.2865	98	80	120				
Uranium	50.6	1.0	50		101	80	120				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICPMS204-B_140408B: 140** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6020**
Analysis Date: **04/09/14 02:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	39.2	1.0	48.73	0.1315	80	75	125				
Arsenic	61.0	1.0	48.73	14.85	95	75	125				
Cadmium	26.1	1.0	24.37	0.8374	104	75	125				
Lead	68.9	1.0	48.73	34.78	70	75	125				S
Molybdenum	49.3	1.0	48.73	0.7445	100	75	125				
Selenium	50.6	1.0	48.73		104	75	125				
Silver	24.5	1.0	24.37	0.8702	97	75	125				
Uranium	51.9	1.0	48.73	1.236	104	75	125				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICPMS204-B_140408B: 141** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6020**
Analysis Date: **04/09/14 02:50** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	38.9	1.0	48.17	0.1315	80	75	125	39.21	0.8	20	
Arsenic	60.5	1.0	48.17	14.85	95	75	125	61.01	0.8	20	
Cadmium	25.6	1.0	24.08	0.8374	103	75	125	26.12	2.1	20	
Lead	69.8	1.0	48.17	34.78	73	75	125	68.93	1.3	20	S
Molybdenum	48.8	1.0	48.17	0.7445	100	75	125	49.29	1.1	20	
Selenium	50.9	1.0	48.17		106	75	125	50.56	0.7	20	
Silver	24.5	1.0	24.08	0.8702	98	75	125	24.54	0.0	20	
Uranium	53.0	1.0	48.17	1.236	107	75	125	51.95	2.0	20	

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 19** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:50** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.3	0.3									
Arsenic	ND	0.4									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	0.07	0.06									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	2	0.6									
Lead	ND	0.6									
Manganese	0.03	0.02									
Nickel	0.09	0.07									
Vanadium	ND	0.1									
Zinc	0.9	0.09									

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140408C: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:54** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	243	5.0	250	0.3175	97	80	120				
Arsenic	47.6	1.0	50		95	80	120				
Beryllium	24.7	1.0	25		99	80	120				
Boron	47.2	1.0	50		94	80	120				
Chromium	47.6	1.0	50	0.0685	95	80	120				
Cobalt	46.9	1.0	50		94	80	120				
Copper	48.7	1.0	50		97	80	120				
Iron	253	5.0	250	1.657	101	80	120				
Lead	46.4	1.0	50		93	80	120				
Manganese	243	1.0	250	0.0345	97	80	120				
Nickel	46.5	1.0	50	0.086	93	80	120				
Vanadium	49.4	1.0	50		99	80	120				
Zinc	46.6	1.0	50	0.8805	92	80	120				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:58** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10800	5.0	14200	0.3175	76	50.7	131.3				
Arsenic	244	1.7	331.4		73	72.3	106.4				
Beryllium	37.5	1.0	49.28		76	76.3	108.6				
Boron	64.7	1.0	90.05		72	59.4	101.9				
Chromium	60.0	1.0	73.43	0.0685	82	72.8	109.1				
Cobalt	42.4	1.0	55.46		76	73.3	103.7				
Copper	211	1.1	270.5		78	77.5	109.6				
Iron	16500	5.0	22220	1.657	74	39.6	138.3				
Lead	150	3.1	180.7		83	75.9	108.6				
Manganese	320	1.0	356.5	0.0345	90	80.8	115.7				
Nickel	45.7	1.0	58.94	0.086	77	72.3	103.4				
Vanadium	55.1	1.0	70.53		78	66.6	107.3				
Zinc	161	1.0	205.8	0.8805	78	74.2	109.9				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140408C: 45** SampType: **Serial Dilution** Lab ID: **H14030374-065ADIL** Method: **SW6010B**

Analysis Date: **04/08/14 15:26** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3910	15				0	0	3932	0.5	10	
Arsenic	18.3	8.3				0	0	11.59		10	N
Beryllium	ND	1.0				0	0	0.2065		10	
Boron	ND	2.4				0	0	0.8641		10	
Chromium	8.53	1.4				0	0	7.429		10	N
Cobalt	ND	2.6				0	0	0.7032		10	
Copper	123	5.1				0	0	122.1	0.8	10	
Iron	7080	14				0	0	7070	0.1	10	
Lead	38.9	15				0	0	33.47		10	N
Manganese	203	1.0				0	0	203.6	0.2	10	
Nickel	4.63	1.6				0	0	3.704		10	N
Vanadium	22.9	3.4				0	0	18.58		10	N
Zinc	160	2.1				0	0	143.1	11	10	R

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 46** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-065APDS** Method: **SW6010B**

Analysis Date: **04/08/14 15:29** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5010	5.0	1187	3932	90	75	125				
Arsenic	218	1.7	237.3	11.59	87	75	125				
Beryllium	105	1.0	118.7	0.2065	89	75	125				
Boron	207	1.0	237.3	0.8641	87	75	125				
Chromium	211	1.0	237.3	7.429	86	75	125				
Cobalt	202	1.0	237.3	0.7032	85	75	125				
Copper	335	1.0	237.3	122.1	90	75	125				
Iron	7980	5.0	1187	7070		75	125				A
Lead	231	3.0	237.3	33.47	83	75	125				
Manganese	1240	1.0	1187	203.6	88	75	125				
Nickel	202	1.0	237.3	3.704	84	75	125				
Vanadium	230	1.0	237.3	18.58	89	75	125				
Zinc	349	1.0	237.3	143.1	87	75	125				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140408C: 56** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6010B**

Analysis Date: **04/08/14 16:06** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5410	5.0	231.3	3932		75	125				A
Arsenic	60.2	1.7	46.25	11.59	105	75	125				
Beryllium	23.4	1.0	23.13	0.2065	100	75	125				
Boron	43.7	1.0	46.25	0.8641	93	75	125				
Chromium	55.3	1.0	46.25	7.429	103	75	125				
Cobalt	44.8	1.0	46.25	0.7032	95	75	125				
Copper	170	1.0	46.25	122.1	103	75	125				
Iron	8440	5.0	231.3	7070		75	125				A
Lead	85.6	2.9	46.25	33.47	113	75	125				
Manganese	422	1.0	231.3	203.6	94	75	125				
Nickel	48.2	1.0	46.25	3.704	96	75	125				
Vanadium	67.5	1.0	46.25	18.58	106	75	125				
Zinc	221	1.0	46.25	143.1	169	75	125				S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 57** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6010B**

Analysis Date: **04/08/14 16:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5220	5.0	230.2	3932		75	125	5413	3.6	20	A
Arsenic	57.2	1.7	46.04	11.59	99	75	125	60.18	5.1	20	
Beryllium	22.7	1.0	23.02	0.2065	98	75	125	23.35	2.7	20	
Boron	40.6	1.0	46.04	0.8641	86	75	125	43.67	7.2	20	
Chromium	52.3	1.0	46.04	7.429	98	75	125	55.3	5.5	20	
Cobalt	42.7	1.0	46.04	0.7032	91	75	125	44.78	4.7	20	
Copper	153	1.0	46.04	122.1	67	75	125	169.8	10	20	S
Iron	7830	5.0	230.2	7070		75	125	8437	7.4	20	A
Lead	103	2.9	46.04	33.47	152	75	125	85.61	19	20	S
Manganese	466	1.0	230.2	203.6	114	75	125	421.9	10.0	20	
Nickel	46.1	1.0	46.04	3.704	92	75	125	48.17	4.4	20	
Vanadium	65.6	1.0	46.04	18.58	102	75	125	67.47	2.9	20	
Zinc	250	1.0	46.04	143.1	232	75	125	221.2	12	20	S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140411A: 40** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6010B**

Analysis Date: **04/11/14 16:01** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.3	0.3									
Arsenic	ND	0.4									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	ND	0.06									
Cobalt	ND	0.1									
Copper	0.3	0.2									
Iron	2	0.6									
Lead	ND	0.6									
Manganese	ND	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.9	0.09									

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 44** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6010B**

Analysis Date: **04/11/14 16:16** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5270	5.0	231.3	4036		75	125				A
Arsenic	64.2	1.7	46.25	14.73	107	75	125				
Beryllium	23.2	1.0	23.13	0.1438	100	75	125				
Boron	46.9	1.0	46.25	0.7986	100	75	125				
Chromium	55.4	1.0	46.25	7.843	103	75	125				
Cobalt	45.2	1.0	46.25		98	75	125				
Copper	166	1.0	46.25	123.5	92	75	125				
Iron	8480	5.0	231.3	7213		75	125				A
Lead	90.6	2.9	46.25	32.59	125	75	125				
Manganese	422	1.0	231.3	207.6	93	75	125				
Nickel	49.2	1.0	46.25	3.642	99	75	125				
Vanadium	67.1	1.0	46.25	18.4	105	75	125				
Zinc	238	1.0	46.25	161.9	164	75	125				S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140411A: 47** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6010B**

Analysis Date: **04/11/14 16:27** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5310	5.0	230.2	4036		75	125	5272	0.8	20	A
Arsenic	59.6	1.7	46.04	14.73	97	75	125	64.18	7.4	20	
Beryllium	23.5	1.0	23.02	0.1438	102	75	125	23.25	1.2	20	
Boron	43.5	1.0	46.04	0.7986	93	75	125	46.94	7.6	20	
Chromium	51.7	1.0	46.04	7.843	95	75	125	55.44	6.9	20	
Cobalt	42.6	1.0	46.04		93	75	125	45.25	6.0	20	
Copper	155	1.0	46.04	123.5	68	75	125	166.2	7.0	20	S
Iron	8160	5.0	230.2	7213		75	125	8478	3.9	20	A
Lead	103	2.9	46.04	32.59	153	75	125	90.59	13	20	S
Manganese	482	1.0	230.2	207.6	119	75	125	422.5	13	20	
Nickel	46.2	1.0	46.04	3.642	92	75	125	49.24	6.3	20	
Vanadium	66.7	1.0	46.04	18.4	105	75	125	67.14	0.7	20	
Zinc	263	1.0	46.04	161.9	220	75	125	237.7	10	20	S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 129** SampType: **Serial Dilution** Lab ID: **H14030374-065BDIL** Method: **SW6010B**

Analysis Date: **04/08/14 15:26** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4860	19				0	0	4887	0.5	10	
Arsenic	22.7	10				0	0	14.4		10	N
Beryllium	ND	1.0				0	0	0.2566		10	
Boron	ND	3.0				0	0	1.074		10	
Chromium	10.6	1.8				0	0	9.232		10	N
Cobalt	ND	3.2				0	0	0.8739		10	
Copper	153	6.3				0	0	151.8	0.8	10	
Iron	8790	17				0	0	8786	0.1	10	
Lead	48.3	18				0	0	41.6		10	N
Manganese	253	1.0				0	0	253	0.2	10	
Nickel	5.76	2.0				0	0	4.603		10	N
Vanadium	28.4	4.2				0	0	23.09		10	N
Zinc	199	2.7				0	0	177.8	11	10	R

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140408C: 130** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-065BPDS** Method: **SW6010B**

Analysis Date: **04/08/14 15:29** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6220	5.0	1475	4887	90	75	125				
Arsenic	271	2.1	294.9	14.4	87	75	125				
Beryllium	131	1.0	147.5	0.2566	89	75	125				
Boron	257	1.0	294.9	1.074	87	75	125				
Chromium	263	1.0	294.9	9.232	86	75	125				
Cobalt	251	1.0	294.9	0.8739	85	75	125				
Copper	416	1.3	294.9	151.8	90	75	125				
Iron	9920	5.0	1475	8786		75	125				A
Lead	288	3.8	294.9	41.6	83	75	125				
Manganese	1550	1.0	1475	253	88	75	125				
Nickel	251	1.0	294.9	4.603	84	75	125				
Vanadium	285	1.0	294.9	23.09	89	75	125				
Zinc	433	1.0	294.9	177.8	87	75	125				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 140** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065BMS** Method: **SW6010B**

Analysis Date: **04/08/14 16:06** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6730	5.0	287.4	4887		75	125				A
Arsenic	74.8	2.1	57.48	14.4	105	75	125				
Beryllium	29.0	1.0	28.74	0.2566	100	75	125				
Boron	54.3	1.0	57.48	1.074	93	75	125				
Chromium	68.7	1.0	57.48	9.232	103	75	125				
Cobalt	55.7	1.0	57.48	0.8739	95	75	125				
Copper	211	1.3	57.48	151.8	103	75	125				
Iron	10500	5.0	287.4	8786		75	125				A
Lead	106	3.7	57.48	41.6	113	75	125				
Manganese	524	1.0	287.4	253	94	75	125				
Nickel	59.9	1.0	57.48	4.603	96	75	125				
Vanadium	83.9	1.0	57.48	23.09	106	75	125				
Zinc	275	1.0	57.48	177.8	169	75	125				S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140408C: 141** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065BMSD** Method: **SW6010B**

Analysis Date: **04/08/14 16:10** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6490	5.0	286.1	4887		75	125	6727	3.6	20	A
Arsenic	71.0	2.1	57.22	14.4	99	75	125	74.79	5.1	20	
Beryllium	28.3	1.0	28.61	0.2566	98	75	125	29.02	2.7	20	
Boron	50.5	1.0	57.22	1.074	86	75	125	54.27	7.2	20	
Chromium	65.1	1.0	57.22	9.232	98	75	125	68.72	5.5	20	
Cobalt	53.1	1.0	57.22	0.8739	91	75	125	55.65	4.7	20	
Copper	190	1.3	57.22	151.8	67	75	125	211	10	20	S
Iron	9730	5.0	286.1	8786		75	125	10480	7.4	20	A
Lead	128	3.6	57.22	41.6	152	75	125	106.4	19	20	S
Manganese	579	1.0	286.1	253	114	75	125	524.3	10.0	20	
Nickel	57.3	1.0	57.22	4.603	92	75	125	59.87	4.4	20	
Vanadium	81.5	1.0	57.22	23.09	102	75	125	83.85	2.9	20	
Zinc	310	1.0	57.22	177.8	232	75	125	275	12	20	S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 170** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065BMS** Method: **SW6010B**

Analysis Date: **04/11/14 16:16** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6550	5.0	287.4	5016		75	125				A
Arsenic	79.8	2.1	57.48	18.3	107	75	125				
Beryllium	28.9	1.0	28.74	0.1787	100	75	125				
Boron	58.3	1.0	57.48	0.9925	100	75	125				
Chromium	68.9	1.0	57.48	9.747	103	75	125				
Cobalt	56.2	1.0	57.48		98	75	125				
Copper	207	1.3	57.48	153.5	92	75	125				
Iron	10500	5.0	287.4	8964		75	125				A
Lead	113	3.7	57.48	40.5	125	75	125				
Manganese	525	1.0	287.4	258	93	75	125				
Nickel	61.2	1.0	57.48	4.526	99	75	125				
Vanadium	83.4	1.0	57.48	22.87	105	75	125				
Zinc	295	1.0	57.48	201.2	164	75	125				S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICP2-HE_140411A: 173** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065BMSD** Method: **SW6010B**

Analysis Date: **04/11/14 16:27** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6600	5.0	286.1	5016		75	125	6552	0.8	20	A
Arsenic	74.1	2.1	57.22	18.3	97	75	125	79.76	7.4	20	
Beryllium	29.2	1.0	28.61	0.1787	102	75	125	28.89	1.2	20	
Boron	54.1	1.0	57.22	0.9925	93	75	125	58.34	7.6	20	
Chromium	64.3	1.0	57.22	9.747	95	75	125	68.9	6.9	20	
Cobalt	53.0	1.0	57.22		93	75	125	56.23	6.0	20	
Copper	193	1.3	57.22	153.5	68	75	125	206.6	7.0	20	S
Iron	10100	5.0	286.1	8964		75	125	10540	3.9	20	A
Lead	128	3.6	57.22	40.5	153	75	125	112.6	13	20	S
Manganese	599	1.0	286.1	258	119	75	125	525	13	20	
Nickel	57.4	1.0	57.22	4.526	92	75	125	61.19	6.3	20	
Vanadium	82.9	1.0	57.22	22.87	105	75	125	83.44	0.7	20	
Zinc	327	1.0	57.22	201.2	220	75	125	295.4	10	20	S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 145** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6020**
Analysis Date: **04/09/14 03:08** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Barium	ND	0.4									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.4	0.3									
Uranium	ND	0.2									
Zinc	6	4									

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140408B: 146** SampType: **Laboratory Control Sample** Lab ID: **LCS-24078** Method: **SW6020**
Analysis Date: **04/09/14 03:12** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	41.3	1.0	121.7		34	2.2	92.9				
Barium	555	1.0	593.2		94	80.6	112.2				
Cadmium	120	1.0	132.4		90	73	105.1				
Lead	176	1.0	180.7		98	75.9	108.6				
Molybdenum	142	1.0	166.2		85	68.6	105.8				
Selenium	183	1.0	189.4		97	72.5	112.2				
Silver	59.7	1.0	66.67	0.4242	89	67.8	112.8				
Uranium	107	1.0	96.62		111	80	120				
Zinc	199	3.4	205.8	5.705	94	74.2	109.9				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140408B: 147** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6020**
Analysis Date: **04/09/14 03:17** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.6	1.0	50		101	80	120				
Barium	50.6	1.0	50		101	80	120				
Cadmium	26.2	1.0	25		105	80	120				
Lead	51.4	1.0	50		103	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 147** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6020**
Analysis Date: **04/09/14 03:17** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	50.5	1.0	50		101	80	120				
Selenium	52.2	1.0	50		104	80	120				
Silver	25.4	1.0	25	0.4242	100	80	120				
Uranium	51.6	1.0	50		103	80	120				
Zinc	56.0	3.5	50	5.705	101	80	120				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140411A: 50** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6020**
Analysis Date: **04/10/14 20:44** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.7	1.0	50		101	80	120				
Barium	51.4	1.0	50		103	80	120				
Cadmium	26.7	1.0	25		107	80	120				
Lead	52.8	1.0	50		106	80	120				
Molybdenum	50.2	1.0	50		100	80	120				
Selenium	55.0	1.0	50		110	80	120				
Silver	23.8	1.0	25		95	80	120				
Uranium	54.9	1.0	50		110	80	120				
Zinc	56.4	3.5	50	6.005	101	80	120				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140411A: 78** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6020**
Analysis Date: **04/10/14 22:47** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	31.8	1.0	46.25	0.2	68	75	125				S
Barium	144	1.0	46.25	108.6	76	75	125				
Cadmium	25.5	1.0	23.13	0.779	107	75	125				
Lead	101	1.0	46.25	41.31	129	75	125				S
Molybdenum	48.4	1.0	46.25	0.6316	103	75	125				
Selenium	49.6	1.0	46.25		107	75	125				
Silver	23.5	1.0	23.13	1.029	97	75	125				
Uranium	54.7	1.0	46.25	2.084	114	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411A: 78** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6020**

Analysis Date: **04/10/14 22:47** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	248	3.2	46.25	173.7	160	75	125				S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140411A: 79** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6020**

Analysis Date: **04/10/14 22:51** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	30.6	1.0	46.04	0.2	66	75	125	31.85	3.9	20	S
Barium	159	1.0	46.04	108.6	109	75	125	143.7	9.8	20	
Cadmium	25.6	1.0	23.02	0.779	108	75	125	25.46	0.4	20	
Lead	124	1.0	46.04	41.31	179	75	125	101.1	20	20	SR
Molybdenum	48.1	1.0	46.04	0.6316	103	75	125	48.43	0.7	20	
Selenium	49.0	1.0	46.04		107	75	125	49.63	1.2	20	
Silver	24.6	1.0	23.02	1.029	102	75	125	23.47	4.5	20	
Uranium	54.4	1.0	46.04	2.084	114	75	125	54.69	0.5	20	
Zinc	288	3.2	46.04	173.7	248	75	125	247.9	15	20	S

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140411A: 207** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6020**

Analysis Date: **04/11/14 10:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Barium	ND	0.4									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Zinc	6	4									

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 17** SampType: **Method Blank** Lab ID: **MB-24079** Method: **SW6010B**

Analysis Date: **04/07/14 11:41** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Arsenic	0.5	0.4									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	ND	0.1									
Cadmium	0.01	0.01									
Chromium	ND	0.06									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	4	0.6									
Lead	ND	0.6									
Manganese	0.05	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.3	0.09									

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6010B**

Analysis Date: **04/07/14 11:44** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	267	5.0	250		107	80	120				
Arsenic	50.2	1.0	50	0.5175	99	80	120				
Barium	53.3	1.0	50		107	80	120				
Beryllium	25.7	1.0	25		103	80	120				
Boron	48.9	1.0	50		98	80	120				
Cadmium	24.6	1.0	25	0.0145	98	80	120				
Chromium	49.7	1.0	50		99	80	120				
Cobalt	49.1	1.0	50		98	80	120				
Copper	52.1	1.0	50		104	80	120				
Iron	251	5.0	250	3.546	99	80	120				
Lead	49.8	1.0	50		100	80	120				
Manganese	252	1.0	250	0.048	101	80	120				
Nickel	48.2	1.0	50		96	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6010B**
Analysis Date: **04/07/14 11:44** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	50.6	1.0	50		101	80	120				
Zinc	50.5	1.0	50	0.2685	100	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 19** SampType: **Laboratory Control Sample** Lab ID: **LCS-24079** Method: **SW6010B**
Analysis Date: **04/07/14 11:48** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13000	5.0	13870		94	50.7	131.3				
Arsenic	267	1.7	323.6	0.5175	82	72.3	106.4				
Barium	540	1.0	579.2		93	80.6	112.2				
Beryllium	42.1	1.0	48.11		88	76.3	108.6				
Boron	69.1	1.0	87.92		79	59.4	101.9				
Cadmium	113	1.0	129.2	0.0145	88	73	105.1				
Chromium	64.2	1.0	71.7		90	72.8	109.1				
Cobalt	45.3	1.0	54.15		84	73.3	103.7				
Copper	240	1.0	264.2		91	77.5	109.6				
Iron	18400	5.0	21700	3.546	85	39.6	138.3				
Lead	166	3.0	176.4		94	75.9	108.6				
Manganese	356	1.0	348.1	0.048	102	80.8	115.7				
Nickel	49.4	1.0	57.55		86	72.3	103.4				
Vanadium	59.0	1.0	68.87		86	66.6	107.3				
Zinc	181	1.0	200.9	0.2685	90	74.2	109.9				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 30** SampType: **Serial Dilution** Lab ID: **H14030374-031ADIL** Method: **SW6010B**
Analysis Date: **04/07/14 12:28** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10100	15				0	0	9238	8.5	10	
Arsenic	ND	8.3				0	0	6.137		10	
Barium	50.6	1.0				0	0	46.78	7.9	10	
Beryllium	0.426	1.0				0	0	0.401		10	N
Boron	5.06	2.4				0	0	2.575		10	N

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 30** SampType: **Serial Dilution** Lab ID: **H14030374-031ADIL** Method: **SW6010B**

Analysis Date: **04/07/14 12:28** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.890	1.0				0	0	0.9411		10	N
Chromium	4.91	1.4				0	0	5.307		10	N
Cobalt	ND	2.6				0	0			10	
Copper	82.9	5.1				0	0	78.28	5.7	10	
Iron	7380	14				0	0	6737	9.2	10	
Lead	37.0	15				0	0	43.24		10	N
Manganese	504	1.0				0	0	461.7	8.7	10	
Nickel	4.39	1.6				0	0	3.177		10	N
Vanadium	11.3	3.4				0	0	9.034		10	N
Zinc	246	2.1				0	0	231.7	5.9	10	

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 31** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-031APDS** Method: **SW6010B**

Analysis Date: **04/07/14 12:32** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10300	5.0	1186	9238		75	125				A
Arsenic	235	1.7	237.1	6.137	97	75	125				
Barium	280	1.0	237.1	46.78	98	75	125				
Beryllium	112	1.0	118.6	0.401	94	75	125				
Boron	226	1.0	237.1	2.575	94	75	125				
Cadmium	112	1.0	118.6	0.9411	94	75	125				
Chromium	228	1.0	237.1	5.307	94	75	125				
Cobalt	223	1.0	237.1		94	75	125				
Copper	307	1.0	237.1	78.28	96	75	125				
Iron	7720	5.0	1186	6737		75	125				A
Lead	264	3.0	237.1	43.24	93	75	125				
Manganese	1560	1.0	1186	461.7	92	75	125				
Nickel	220	1.0	237.1	3.177	91	75	125				
Vanadium	230	1.0	237.1	9.034	93	75	125				
Zinc	455	1.0	237.1	231.7	94	75	125				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 32** SampType: **Sample Matrix Spike** Lab ID: **H14030374-031AMS** Method: **SW6010B**

Analysis Date: **04/07/14 12:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12400	5.0	230.2	9238		75	125				A
Arsenic	52.6	1.7	46.04	6.137	101	75	125				
Barium	96.8	1.0	46.04	46.78	109	75	125				
Beryllium	23.8	1.0	23.02	0.401	102	75	125				
Boron	47.2	1.0	46.04	2.575	97	75	125				
Cadmium	23.0	1.0	23.02	0.9411	96	75	125				
Chromium	50.6	1.0	46.04	5.307	98	75	125				
Cobalt	44.4	1.0	46.04		96	75	125				
Copper	125	1.0	46.04	78.28	102	75	125				
Iron	8120	5.0	230.2	6737		75	125				A
Lead	85.2	2.9	46.04	43.24	91	75	125				
Manganese	717	1.0	230.2	461.7	111	75	125				
Nickel	46.7	1.0	46.04	3.177	95	75	125				
Vanadium	56.6	1.0	46.04	9.034	103	75	125				
Zinc	279	1.0	46.04	231.7		75	125				A

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031AMSD** Method: **SW6010B**

Analysis Date: **04/07/14 12:39** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12700	5.0	232.3	9238		75	125	12440	1.9	20	A
Arsenic	55.1	1.7	46.47	6.137	105	75	125	52.55	4.7	20	
Barium	98.6	1.0	46.47	46.78	112	75	125	96.75	1.9	20	
Beryllium	24.0	1.0	23.23	0.401	102	75	125	23.8	1.0	20	
Boron	48.5	1.0	46.47	2.575	99	75	125	47.21	2.7	20	
Cadmium	24.1	1.0	23.23	0.9411	100	75	125	22.96	5.0	20	
Chromium	52.7	1.0	46.47	5.307	102	75	125	50.62	4.0	20	
Cobalt	46.3	1.0	46.47		100	75	125	44.36	4.4	20	
Copper	128	1.0	46.47	78.28	108	75	125	125.4	2.3	20	
Iron	8270	5.0	232.3	6737		75	125	8116	1.9	20	A
Lead	92.6	3.0	46.47	43.24	106	75	125	85.22	8.3	20	
Manganese	734	1.0	232.3	461.7	117	75	125	716.9	2.3	20	
Nickel	49.3	1.0	46.47	3.177	99	75	125	46.73	5.3	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031AMSD** Method: **SW6010B**

Analysis Date: **04/07/14 12:39** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	57.3	1.0	46.47	9.034	**104**	75	125	56.59	**1.3**	20	
Zinc	295	1.0	46.47	231.7		75	125	278.5	**5.7**	20	A

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 152** SampType: **Method Blank** Lab ID: **MB-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:27** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICPMS204-B_140407B: 153** SampType: **Laboratory Control Sample** Lab ID: **LCS-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:31** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.5	1.0	118.9		40	2.2	92.9				
Arsenic	300	1.0	323.6		93	72.3	106.4				
Cadmium	125	1.0	129.2		97	73	105.1				
Lead	184	1.0	176.4		104	75.9	108.6				
Molybdenum	148	1.0	162.3		91	68.6	105.8				
Selenium	188	1.0	184.9		102	72.5	112.2				
Silver	63.0	1.0	65.09		97	67.8	112.8				
Uranium	110	1.0	94.34		117	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICPMS204-B_140407B: 154** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.9	1.0	50		102	80	120				
Arsenic	53.2	1.0	50		106	80	120				
Cadmium	27.1	1.0	25		108	80	120				
Lead	53.2	1.0	50		106	80	120				
Molybdenum	50.5	1.0	50		101	80	120				
Selenium	53.3	1.0	50		107	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 154** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	25.3	1.0	25		101	80	120				
Uranium	52.2	1.0	50		104	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICPMS204-B_140407B: 168** SampType: **Sample Matrix Spike** Lab ID: **H14030374-031AMS** Method: **SW6020**
Analysis Date: **04/08/14 02:38** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.3	1.0	46.04	0.1457	39	75	125				S
Arsenic	55.6	1.0	46.04	6.317	107	75	125				
Cadmium	25.9	1.0	23.02	1.285	107	75	125				
Lead	93.2	1.0	46.04	43.53	108	75	125				
Molybdenum	46.8	1.0	46.04	0.9827	100	75	125				
Selenium	50.7	1.0	46.04		110	75	125				
Silver	23.7	1.0	23.02	0.4118	101	75	125				
Uranium	50.2	1.0	46.04	1.156	106	75	125				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICPMS204-B_140407B: 169** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031AMSD** Method: **SW6020**
Analysis Date: **04/08/14 02:42** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	16.8	1.0	46.47	0.1457	36	75	125	18.26	8.1	20	S
Arsenic	56.4	1.0	46.47	6.317	108	75	125	55.64	1.3	20	
Cadmium	26.2	1.0	23.23	1.285	107	75	125	25.9	1.0	20	
Lead	95.2	1.0	46.47	43.53	111	75	125	93.16	2.2	20	
Molybdenum	47.3	1.0	46.47	0.9827	100	75	125	46.82	1.1	20	
Selenium	49.3	1.0	46.47		106	75	125	50.69	2.7	20	
Silver	24.3	1.0	23.23	0.4118	103	75	125	23.69	2.8	20	
Uranium	50.7	1.0	46.47	1.156	107	75	125	50.16	1.0	20	

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 207** SampType: **Sample Matrix Spike** Lab ID: **H14030374-031BMS** Method: **SW6020**

Analysis Date: **04/08/14 02:38** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	57.1	1.0	144.1	0.4561	39	75	125				S
Arsenic	174	1.0	144.1	19.77	107	75	125				
Cadmium	81.1	1.0	72.06	4.021	107	75	125				
Lead	292	1.0	144.1	136.3	108	75	125				
Molybdenum	147	1.0	144.1	3.076	100	75	125				
Selenium	159	1.0	144.1		110	75	125				
Silver	74.2	1.0	72.06	1.289	101	75	125				
Uranium	157	1.0	144.1	3.619	106	75	125				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICPMS204-B_140407B: 208** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031BMSD** Method: **SW6020**

Analysis Date: **04/08/14 02:42** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	52.7	1.0	145.5	0.4561	36	75	125	57.14	8.1	20	S
Arsenic	176	1.0	145.5	19.77	108	75	125	174.2	1.3	20	
Cadmium	81.9	1.0	72.73	4.021	107	75	125	81.07	1.0	20	
Lead	298	1.0	145.5	136.3	111	75	125	291.6	2.2	20	
Molybdenum	148	1.0	145.5	3.076	100	75	125	146.6	1.1	20	
Selenium	154	1.0	145.5		106	75	125	158.7	2.7	20	
Silver	76.2	1.0	72.73	1.289	103	75	125	74.15	2.8	20	
Uranium	159	1.0	145.5	3.619	107	75	125	157	1.0	20	

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24097

Date: *18-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 35** SampType: **Method Blank** Lab ID: **MB-24097** Method: **SW7471B**
Analysis Date: **04/09/14 11:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0009									

Associated samples: **H14030371-004A; H14030371-004B; H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-007A; H14030371-007B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-010A; H14030371-010B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **HGCV201-H_140409A: 36** SampType: **Laboratory Control Sample** Lab ID: **LCS-24097** Method: **SW7471B**
Analysis Date: **04/09/14 11:12** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.6	0.50	4.897		93	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-007A; H14030371-007B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-010A; H14030371-010B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **HGCV201-H_140409A: 37** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24097** Method: **SW7471B**
Analysis Date: **04/09/14 11:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		104	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-007A; H14030371-007B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-010A; H14030371-010B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **HGCV201-H_140409A: 55** SampType: **Sample Matrix Spike** Lab ID: **H14030371-006AMS** Method: **SW7471B**
Analysis Date: **04/09/14 12:06** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.99	0.50	0.999	0.005202	99	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-007A; H14030371-007B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-010A; H14030371-010B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **HGCV201-H_140409A: 56** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-006AMSD** Method: **SW7471B**
Analysis Date: **04/09/14 12:08** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.99	0.50	0.997	0.005202	99	80	120	0.9932	0.0	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24097

Date: *18-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 56** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-006AMSD** Method: **SW7471B**

Analysis Date: **04/09/14 12:08** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030371-004A; H14030371-004B; H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-007A; H14030371-007B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-010A; H14030371-010B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24149

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 48** SampType: **Method Blank** Lab ID: **MB-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:30** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 49** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:34** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.8	1.0	50		94	80	120				

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 50** SampType: **Laboratory Control Sample** Lab ID: **LCS-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:38** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	252	1.8	336.3		75	72.3	106.4				

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 80** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**
Analysis Date: **04/11/14 18:29** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.4	8.4				0	0	44.27		10	N

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 81** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-063APDS** Method: **SW6010B**
Analysis Date: **04/11/14 18:32** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	288	1.7	240.7	44.27	101	75	125				

Associated samples: **H14030371-009A; H14030371-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24149

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 82** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6010B**

Analysis Date: **04/11/14 18:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	61.5	1.8	48.73	44.27	35	75	125				S

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 83** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/11/14 18:40** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	66.1	1.7	48.17	44.27	45	75	125	61.47	7.2	20	S

Associated samples: **H14030371-009A; H14030371-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 26** SampType: **Method Blank** Lab ID: **MB-24203** Method: **SW6010B**
Analysis Date: **04/16/14 18:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.2	0.2									
Iron	2	0.6									
Zinc	0.2	0.09									

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 27** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24203** Method: **SW6010B**
Analysis Date: **04/16/14 18:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	45.6	1.0	50	0.2265	91	80	120				
Iron	227	5.0	250	2.41	90	80	120				
Zinc	44.2	1.0	50	0.213	88	80	120				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 28** SampType: **Laboratory Control Sample** Lab ID: **LCS-24203** Method: **SW6010B**
Analysis Date: **04/16/14 18:17** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	233	1.1	274.5	0.2265	85	77.5	109.6				
Iron	17300	5.0	22550	2.41	77	39.6	138.3				
Zinc	172	1.0	208.8	0.213	82	74.2	109.9				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 51** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**
Analysis Date: **04/16/14 19:41** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	48.3	5.5				0	0	50.12		10	N
Iron	5900	15				0	0	5932	0.5	10	
Zinc	109	2.3				0	0	104.8	3.8	10	

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 52** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-063APDS** Method: **SW6010B**

Analysis Date: **04/16/14 19:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	298	1.1	257.5	50.12	96	75	125				
Iron	7020	5.0	1288	5932		75	125				A
Zinc	338	1.0	257.5	104.8	91	75	125				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 53** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6010B**

Analysis Date: **04/16/14 19:49** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	118	1.1	50	50.12	135	75	125				S
Iron	5770	5.0	250	5932		75	125				A
Zinc	124	1.0	50	104.8	39	75	125				S

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 54** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/16/14 19:52** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	107	1.1	50	50.12	113	75	125	114.7	7.3	20	
Iron	5630	5.0	250	5932		75	125	5623	0.1	20	A
Zinc	178	1.0	50	104.8	147	75	125	120.9	38	20	SR

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95844

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140327A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **03/27/14 12:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.965	0.010	1		97	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **03/27/14 12:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.922	0.011	1		92	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **03/27/14 12:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	-0.0175	0.010				0	0				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **03/27/14 12:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	ND	0.001									

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 27** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **03/27/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.499	0.010	0.5		100	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95844

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140327A: 29** SampType: **Sample Matrix Spike** Lab ID: **H14030353-011CMS** Method: **E353.2**
Analysis Date: **03/27/14 13:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.89	0.011	1	0.9462	95	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 30** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030353-011CMSD** Method: **E353.2**
Analysis Date: **03/27/14 13:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.83	0.011	1	0.9462	88	90	110	1.894	3.6	20	S

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 44** SampType: **Sample Matrix Spike** Lab ID: **H14030374-003DMS** Method: **E353.2**
Analysis Date: **03/27/14 13:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	2.12	0.011	1	1.248	87	90	110				S

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140327A: 45** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-003DMSD** Method: **E353.2**
Analysis Date: **03/27/14 13:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	2.11	0.011	1	1.248	86	90	110	2.115	0.4	20	S

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **03/27/14 09:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.761	0.10	0.8		95	95	105				
Calcium	39.7	1.0	40		99	95	105				
Magnesium	38.7	1.0	40		97	95	105				
Potassium	40.5	1.0	40		101	95	105				
Sodium	40.6	1.0	40		102	95	105				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **03/27/14 09:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.52	0.10	2.5		101	95	105				
Calcium	25.5	1.0	25		102	95	105				
Magnesium	24.8	1.0	25		99	95	105				
Potassium	24.9	1.0	25		100	95	105				
Sodium	24.9	1.0	25		100	95	105				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **03/27/14 09:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	-0.00331	0.10				0	0				
Calcium	464	1.0	500		93	80	120				
Magnesium	492	1.0	500		98	80	120				
Potassium	-0.114	1.0				0	0				
Sodium	0.0320	1.0				0	0				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **03/27/14 09:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.987	0.10	1		99	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **03/27/14 09:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	473	1.0	500		95	80	120				
Magnesium	503	1.0	500		101	80	120				
Potassium	19.8	1.0	20		99	80	120				
Sodium	19.7	1.0	20		99	80	120				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**

Analysis Date: **03/27/14 09:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.1	0.03									
Magnesium	ND	0.04									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**

Analysis Date: **03/27/14 09:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.945	0.10	1		95	85	115				
Calcium	47.2	1.0	50	0.1115	94	85	115				
Magnesium	45.4	1.0	50		91	85	115				
Potassium	47.6	1.0	50		95	85	115				
Sodium	48.0	1.0	50		96	85	115				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 17** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001BMS2** Method: **E200.7**

Analysis Date: **03/27/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.991	0.050	1	0.02234	97	70	130				
Calcium	79.2	1.0	50	29.86	99	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 17** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001BMS2** Method: **E200.7**

Analysis Date: **03/27/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	54.3	1.0	50	7.267	94	70	130				
Potassium	53.4	1.0	50	3.691	99	70	130				
Sodium	61.4	1.0	50	11.38	100	70	130				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 18** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001BMSD2** Method: **E200.7**

Analysis Date: **03/27/14 09:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.972	0.050	1	0.02234	95	70	130	0.9906	1.9	20	
Calcium	79.1	1.0	50	29.86	98	70	130	79.22	0.1	20	
Magnesium	54.0	1.0	50	7.267	93	70	130	54.34	0.6	20	
Potassium	53.5	1.0	50	3.691	100	70	130	53.43	0.2	20	
Sodium	61.4	1.0	50	11.38	100	70	130	61.42	0.0	20	

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICP2-HE_140327A: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **03/27/14 09:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.38	0.10	2.5		95	90	110				
Calcium	24.7	1.0	25		99	90	110				
Magnesium	22.9	1.0	25		92	90	110				
Potassium	24.4	1.0	25		98	90	110				
Sodium	24.5	1.0	25		98	90	110				

Associated samples: **H14030371-002B; H14030371-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95852

Date: *18-Apr-14*

Run ID :Run Order: **IC102-H_140327A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **03/27/14 11:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		100	90	110				
Sulfate	400	1.0	400		99	90	110				

Associated samples: **H14030371-003A**

Run ID :Run Order: **IC102-H_140327A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **03/27/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.008									
Sulfate	ND	0.08									

Associated samples: **H14030371-003A**

Run ID :Run Order: **IC102-H_140327A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **03/27/14 11:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	51	1.0	50		102	90	110				
Sulfate	210	1.0	200		103	90	110				

Associated samples: **H14030371-003A**

Run ID :Run Order: **IC102-H_140327A: 44** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV032714-2** Method: **E300.0**
Analysis Date: **03/27/14 16:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		108	90	110				
Sulfate	430	1.0	400		108	90	110				

Associated samples:

Run ID :Run Order: **IC102-H_140327A: 58** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV032714-3** Method: **E300.0**
Analysis Date: **03/27/14 19:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	430	1.0	400		109	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95852

Date: *18-Apr-14*

Run ID :Run Order: **IC102-H_140327A: 58** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV032714-3** Method: **E300.0**

Analysis Date: **03/27/14 19:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030371-003A**

Run ID :Run Order: **IC102-H_140327A: 61** SampType: **Sample Matrix Spike** Lab ID: **H14030371-002AMS** Method: **E300.0**

Analysis Date: **03/27/14 19:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	77	1.0	50	24.21	105	90	110				
Sulfate	250	1.0	200	39.72	107	90	110				

Associated samples: **H14030371-003A**

Run ID :Run Order: **IC102-H_140327A: 62** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-002AMSD** Method: **E300.0**

Analysis Date: **03/27/14 20:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	77	1.0	50	24.21	106	90	110	76.74	0.7	20	
Sulfate	260	1.0	200	39.72	109	90	110	254.5	1.1	20	

Associated samples: **H14030371-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95860

Date: *18-Apr-14*

Run ID :Run Order: **MAN-TECH_140327B: 56** SampType: **Method Blank** Lab ID: **MBLK** Method: **A2320 B**
Analysis Date: **03/27/14 20:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	ND	2									

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **MAN-TECH_140327B: 58** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **03/27/14 20:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	620	4.0	600		**104**	90	110				

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **MAN-TECH_140327B: 62** SampType: **Sample Duplicate** Lab ID: **H14030353-013ADUP** Method: **A2320 B**
Analysis Date: **03/27/14 20:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	780	4.0						781.6	**0.5**	10	
Bicarbonate as HCO3	950	4.0						953.6	**0.5**	10	

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **MAN-TECH_140327B: 65** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001AMS** Method: **A2320 B**
Analysis Date: **03/27/14 21:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	720	4.0	600	89.49	**106**	80	120				

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **MAN-TECH_140327B: 85** SampType: **Sample Duplicate** Lab ID: **H14030374-016ADUP** Method: **A2320 B**
Analysis Date: **03/27/14 23:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	110	4.0						113.4	**0.6**	10	
Bicarbonate as HCO3	140	4.0						136.5	**0.3**	10	

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95861

Date: *18-Apr-14*

Run ID :Run Order: **FIA202-HE_140328A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**

Analysis Date: **03/28/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.235	0.010	0.25		94	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA202-HE_140328A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**

Analysis Date: **03/28/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0928	0.010	0.1		93	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA202-HE_140328A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**

Analysis Date: **03/28/14 10:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.000870	0.010				0	0				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95869

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140328A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **03/28/14 13:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.470	0.10	0.5		94	90	110				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **FIA203-HE_140328A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **03/28/14 13:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0596	0.10				0	0				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **FIA203-HE_140328A: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **03/28/14 13:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.460	0.10	0.5		92	90	110				

Associated samples:

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95894

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140331A: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **03/31/14 09:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	15.7	0.50	15.2		103	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140331A: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **03/31/14 09:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.974	0.055	1		97	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140331A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **03/31/14 09:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.000956	0.050				0	0				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140331A: 23** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **03/31/14 09:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.529	0.050	0.5		106	90	110				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Run ID :Run Order: **FIA203-HE_140331A: 26** SampType: **Sample Matrix Spike** Lab ID: **H14030317-001AMS** Method: **E350.1**
Analysis Date: **03/31/14 09:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	19.8	0.55	10	10.13	97	80	120				

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95894

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140331A: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030317-001AMSD** Method: **E350.1**

Analysis Date: **03/31/14 09:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	19.7	0.55	10	10.13	**96**	80	120	19.83	**0.6**	10	

Associated samples: **H14030371-001D; H14030371-002D; H14030371-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 29** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **03/28/14 12:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.289	0.10	0.3		96	90	110				
Antimony	0.0593	0.050	0.06		99	90	110				
Arsenic	0.0609	0.0050	0.06		101	90	110				
Barium	0.0605	0.10	0.06		101	90	110				
Beryllium	0.0299	0.0010	0.03		100	90	110				
Cadmium	0.0321	0.0010	0.03		107	90	110				
Calcium	3.21	0.50	3		107	90	110				
Chromium	0.0610	0.010	0.06		102	90	110				
Cobalt	0.0589	0.010	0.06		98	90	110				
Copper	0.0617	0.010	0.06		103	90	110				
Iron	0.306	0.020	0.3		102	90	110				
Lead	0.0627	0.010	0.06		105	90	110				
Magnesium	3.14	0.50	3		105	90	110				
Manganese	0.301	0.010	0.3		100	90	110				
Molybdenum	0.0589	0.0050	0.06		98	90	110				
Nickel	0.0617	0.010	0.06		103	90	110				
Potassium	3.11	0.50	3		104	90	110				
Selenium	0.0626	0.0050	0.06		104	90	110				
Silver	0.0307	0.0050	0.03		102	90	110				
Sodium	3.07	0.50	3		102	90	110				
Uranium	0.0602	0.0010	0.06		100	90	110				
Vanadium	0.0599	0.10	0.06		100	90	110				
Zinc	0.0622	0.010	0.06		104	90	110				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 30** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.4	0.10	40		93	70	130				
Antimony	0.000124	0.050									
Arsenic	0.000208	0.0050									
Barium	0.000183	0.10									
Beryllium	1.50E-05	0.0010									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 30** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.000696	0.0010									
Calcium	110	0.50	120		92	70	130				
Chromium	0.00113	0.010									
Cobalt	0.000432	0.010									
Copper	0.000376	0.010									
Iron	95.2	0.020	100		95	70	130				
Lead	0.000257	0.010									
Magnesium	40.0	0.50	40		100	70	130				
Manganese	0.000166	0.010									
Molybdenum	0.731	0.0050	0.8		91	70	130				
Nickel	-0.000590	0.010									
Potassium	40.7	0.50	40		102	70	130				
Selenium	0.000701	0.0050									
Silver	0.000195	0.0050									
Sodium	99.9	0.50	100		100	70	130				
Uranium	4.30E-05	0.0010									
Vanadium	8.30E-05	0.10									
Zinc	0.00176	0.010									

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 31** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	36.8	0.10	40		92	70	130				
Antimony	0.000175	0.050				0	0				
Arsenic	0.0105	0.0050	0.01		105	70	130				
Barium	0.000163	0.10				0	0				
Beryllium	1.00E-06	0.0010				0	0				
Cadmium	0.00986	0.0010	0.01		99	70	130				
Calcium	111	0.50	120		92	70	130				
Chromium	0.0211	0.010	0.02		105	70	130				
Cobalt	0.0221	0.010	0.02		111	70	130				
Copper	0.0197	0.010	0.02		99	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 31** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	95.9	0.020	100		96	70	130				
Lead	0.000249	0.010				0	0				
Magnesium	39.8	0.50	40		100	70	130				
Manganese	0.0221	0.010	0.02		110	70	130				
Molybdenum	0.733	0.0050	0.8		92	70	130				
Nickel	0.0193	0.010	0.02		96	70	130				
Potassium	41.2	0.50	40		103	70	130				
Selenium	0.00962	0.0050	0.01		96	70	130				
Silver	0.0188	0.0050	0.02		94	70	130				
Sodium	101	0.50	100		101	70	130				
Uranium	1.60E-05	0.0010				0	0				
Vanadium	0.0204	0.10	0.02		102	70	130				
Zinc	0.0109	0.010	0.01		109	70	130				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 38** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **03/28/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	ND	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	ND	3E-05									
Iron	0.0005	0.0002									
Lead	ND	8E-06									
Magnesium	ND	0.0006									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 38** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **03/28/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	ND	0.0003									

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140328B: 39** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **03/28/14 13:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0512	0.10	0.05		102	85	115				
Antimony	0.0497	0.050	0.05		99	85	115				
Arsenic	0.0503	0.0050	0.05		101	85	115				
Barium	0.0494	0.10	0.05		99	85	115				
Beryllium	0.0497	0.0010	0.05		99	85	115				
Cadmium	0.0508	0.0010	0.05		102	85	115				
Chromium	0.0502	0.010	0.05		100	85	115				
Cobalt	0.0551	0.010	0.05		110	85	115				
Copper	0.0509	0.010	0.05		102	85	115				
Iron	0.157	0.020	0.15	0.000511	104	85	115				
Lead	0.0510	0.010	0.05		102	85	115				
Magnesium	1.10	0.50	1		110	85	115				
Manganese	0.0508	0.010	0.05		102	85	115				
Molybdenum	0.0484	0.0050	0.05		97	85	115				
Nickel	0.0517	0.010	0.05		103	85	115				
Selenium	0.0523	0.0050	0.05		105	85	115				
Silver	0.0200	0.0050	0.02		100	85	115				
Uranium	0.0465	0.0010	0.05		93	85	115				
Vanadium	0.0492	0.10	0.05		98	85	115				
Zinc	0.0521	0.010	0.05		104	85	115				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 78** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **03/28/14 15:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.297	0.10	0.3		99	90	110				
Antimony	0.0590	0.050	0.06		98	90	110				
Arsenic	0.0610	0.0050	0.06		102	90	110				
Barium	0.0598	0.10	0.06		100	90	110				
Beryllium	0.0306	0.0010	0.03		102	90	110				
Cadmium	0.0321	0.0010	0.03		107	90	110				
Calcium	3.22	0.50	3		107	90	110				
Chromium	0.0617	0.010	0.06		103	90	110				
Cobalt	0.0592	0.010	0.06		99	90	110				
Copper	0.0627	0.010	0.06		105	90	110				
Iron	0.319	0.020	0.3		106	90	110				
Lead	0.0619	0.010	0.06		103	90	110				
Magnesium	3.16	0.50	3		105	90	110				
Manganese	0.301	0.010	0.3		100	90	110				
Molybdenum	0.0591	0.0050	0.06		98	90	110				
Nickel	0.0626	0.010	0.06		104	90	110				
Potassium	3.14	0.50	3		105	90	110				
Selenium	0.0649	0.0050	0.06		108	90	110				
Silver	0.0308	0.0050	0.03		103	90	110				
Sodium	3.07	0.50	3		102	90	110				
Uranium	0.0602	0.0010	0.06		100	90	110				
Vanadium	0.0599	0.10	0.06		100	90	110				
Zinc	0.0628	0.010	0.06		105	90	110				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 79** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 15:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.4	0.10	40		94	70	130				
Antimony	0.000127	0.050									
Arsenic	0.000266	0.0050									
Barium	0.000193	0.10									
Beryllium	2.10E-05	0.0010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 79** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 15:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.000660	0.0010									
Calcium	110	0.50	120		92	70	130				
Chromium	0.00114	0.010									
Cobalt	0.000371	0.010									
Copper	0.000393	0.010									
Iron	96.1	0.020	100		96	70	130				
Lead	0.000255	0.010									
Magnesium	39.8	0.50	40		99	70	130				
Manganese	0.000190	0.010									
Molybdenum	0.740	0.0050	0.8		93	70	130				
Nickel	0.000578	0.010									
Potassium	40.7	0.50	40		102	70	130				
Selenium	0.000693	0.0050									
Silver	0.000205	0.0050									
Sodium	99.4	0.50	100		99	70	130				
Uranium	4.70E-05	0.0010									
Vanadium	9.60E-05	0.10									
Zinc	0.00164	0.010									

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 80** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.4	0.10	40		94	70	130				
Antimony	0.000176	0.050				0	0				
Arsenic	0.0101	0.0050	0.01		101	70	130				
Barium	0.000214	0.10				0	0				
Beryllium	7.00E-06	0.0010				0	0				
Cadmium	0.0100	0.0010	0.01		100	70	130				
Calcium	111	0.50	120		92	70	130				
Chromium	0.0211	0.010	0.02		105	70	130				
Cobalt	0.0217	0.010	0.02		109	70	130				
Copper	0.0199	0.010	0.02		100	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 80** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	98.8	0.020	100		99	70	130				
Lead	0.000253	0.010				0	0				
Magnesium	40.3	0.50	40		101	70	130				
Manganese	0.0220	0.010	0.02		110	70	130				
Molybdenum	0.739	0.0050	0.8		92	70	130				
Nickel	0.0203	0.010	0.02		101	70	130				
Potassium	40.5	0.50	40		101	70	130				
Selenium	0.00992	0.0050	0.01		99	70	130				
Silver	0.0190	0.0050	0.02		95	70	130				
Sodium	100	0.50	100		100	70	130				
Uranium	2.20E-05	0.0010				0	0				
Vanadium	0.0202	0.10	0.02		101	70	130				
Zinc	0.0117	0.010	0.01		117	70	130				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 108** SampType: **Sample Matrix Spike** Lab ID: **H14030353-007BMS** Method: **E200.8**

Analysis Date: **03/28/14 18:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0489	0.030	0.05	0.00182	94	70	130				
Antimony	0.0517	0.0010	0.05	0.0000657	103	70	130				
Arsenic	0.0601	0.0010	0.05	0.001688	117	70	130				
Barium	0.0665	0.050	0.05	0.01587	101	70	130				
Beryllium	0.0456	0.0010	0.05		91	70	130				
Cadmium	0.0470	0.0010	0.05	0.0000232	94	70	130				
Chromium	0.0496	0.0050	0.05	0.0001222	99	70	130				
Cobalt	0.0537	0.0050	0.05	0.0008847	106	70	130				
Copper	0.0483	0.0050	0.05	0.0006833	95	70	130				
Iron	4.15	0.020	0.15	3.955		70	130				A
Lead	0.0530	0.0010	0.05	0.0000357	106	70	130				
Magnesium	178	1.0	1	176		70	130				A
Manganese	0.558	0.0010	0.05	0.504		70	130				A
Molybdenum	0.0567	0.0010	0.05	0.004293	105	70	130				
Nickel	0.0492	0.0050	0.05	0.0006578	97	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 108** SampType: **Sample Matrix Spike** Lab ID: **H14030353-007BMS** Method: **E200.8**

Analysis Date: **03/28/14 18:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.0675	0.0010	0.05	0.000165	135	70	130				S
Silver	0.0169	0.0010	0.02		85	70	130				
Uranium	0.0569	0.00030	0.05	0.005853	102	70	130				
Vanadium	0.0526	0.010	0.05	0.001697	102	70	130				
Zinc	0.0503	0.010	0.05	0.002347	96	70	130				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140328B: 109** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030353-007BMSD** Method: **E200.8**

Analysis Date: **03/28/14 18:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0505	0.030	0.05	0.00182	97	70	130	0.04893	3.2	20	
Antimony	0.0525	0.0010	0.05	0.0000657	105	70	130	0.05173	1.5	20	
Arsenic	0.0602	0.0010	0.05	0.001688	117	70	130	0.0601	0.2	20	
Barium	0.0670	0.050	0.05	0.01587	102	70	130	0.06648	0.7	20	
Beryllium	0.0463	0.0010	0.05		93	70	130	0.04558	1.5	20	
Cadmium	0.0469	0.0010	0.05	0.0000232	94	70	130	0.04705	0.4	20	
Chromium	0.0498	0.0050	0.05	0.0001222	99	70	130	0.04959	0.4	20	
Cobalt	0.0544	0.0050	0.05	0.0008847	107	70	130	0.05372	1.2	20	
Copper	0.0484	0.0050	0.05	0.0006833	95	70	130	0.04834	0.1	20	
Iron	4.13	0.020	0.15	3.955		70	130	4.146	0.5	20	A
Lead	0.0522	0.0010	0.05	0.0000357	104	70	130	0.05296	1.5	20	
Magnesium	178	1.0	1	176		70	130	178	0.2	20	A
Manganese	0.559	0.0010	0.05	0.504		70	130	0.5576	0.2	20	A
Molybdenum	0.0570	0.0010	0.05	0.004293	105	70	130	0.05666	0.6	20	
Nickel	0.0481	0.0050	0.05	0.0006578	95	70	130	0.04918	2.2	20	
Selenium	0.0675	0.0010	0.05	0.000165	135	70	130	0.06753	0.1	20	S
Silver	0.0171	0.0010	0.02		86	70	130	0.01691	1.4	20	
Uranium	0.0565	0.00030	0.05	0.005853	101	70	130	0.05691	0.6	20	
Vanadium	0.0525	0.010	0.05	0.001697	102	70	130	0.05256	0.1	20	
Zinc	0.0499	0.010	0.05	0.002347	95	70	130	0.05034	0.8	20	

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 142** SampType: **Sample Matrix Spike** Lab ID: **H14030374-004BMS** Method: **E200.8**

Analysis Date: **03/28/14 20:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0528	0.030	0.05	0.004047	98	70	130				
Antimony	0.0507	0.0010	0.05	0.00035	101	70	130				
Arsenic	0.0565	0.0010	0.05	0.004632	104	70	130				
Barium	0.0967	0.050	0.05	0.04841	97	70	130				
Beryllium	0.0493	0.0010	0.05		99	70	130				
Cadmium	0.0521	0.0010	0.05	0.0001248	104	70	130				
Chromium	0.0490	0.0050	0.05	0.0001705	98	70	130				
Cobalt	0.0523	0.0050	0.05	0.0004657	104	70	130				
Copper	0.0589	0.0050	0.05	0.009747	98	70	130				
Iron	0.290	0.020	0.15	0.1418	99	70	130				
Lead	0.0523	0.0010	0.05	0.0004801	104	70	130				
Magnesium	13.5	1.0	1	12.61		70	130				A
Manganese	0.259	0.0010	0.05	0.2004		70	130				A
Molybdenum	0.0546	0.0010	0.05	0.005105	99	70	130				
Nickel	0.0499	0.0050	0.05	0.0007731	98	70	130				
Selenium	0.0555	0.0010	0.05	0.0001522	111	70	130				
Silver	0.0187	0.0010	0.02		94	70	130				
Uranium	0.0563	0.00030	0.05	0.005627	101	70	130				
Vanadium	0.0503	0.010	0.05	0.002041	97	70	130				
Zinc	0.105	0.010	0.05	0.05442	101	70	130				

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140328B: 143** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-004BMSD** Method: **E200.8**

Analysis Date: **03/28/14 20:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0534	0.030	0.05	0.004047	99	70	130	0.0528	1.2	20	
Antimony	0.0512	0.0010	0.05	0.00035	102	70	130	0.05072	1.0	20	
Arsenic	0.0569	0.0010	0.05	0.004632	105	70	130	0.0565	0.7	20	
Barium	0.0981	0.050	0.05	0.04841	99	70	130	0.09674	1.4	20	
Beryllium	0.0495	0.0010	0.05		99	70	130	0.04934	0.3	20	
Cadmium	0.0526	0.0010	0.05	0.0001248	105	70	130	0.05208	0.9	20	
Chromium	0.0500	0.0050	0.05	0.0001705	100	70	130	0.04903	1.9	20	
Cobalt	0.0506	0.0050	0.05	0.0004657	100	70	130	0.05227	3.2	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 143** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-004BMSD** Method: **E200.8**

Analysis Date: **03/28/14 20:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0596	0.0050	0.05	0.009747	100	70	130	0.0589	1.2	20	
Iron	0.287	0.020	0.15	0.1418	97	70	130	0.2899	1.0	20	
Lead	0.0522	0.0010	0.05	0.0004801	103	70	130	0.05234	0.2	20	
Magnesium	13.6	1.0	1	12.61		70	130	13.51	0.8	20	A
Manganese	0.256	0.0010	0.05	0.2004		70	130	0.2586	1.1	20	A
Molybdenum	0.0544	0.0010	0.05	0.005105	99	70	130	0.05457	0.3	20	
Nickel	0.0505	0.0050	0.05	0.0007731	99	70	130	0.04988	1.2	20	
Selenium	0.0548	0.0010	0.05	0.0001522	109	70	130	0.05549	1.2	20	
Silver	0.0191	0.0010	0.02		96	70	130	0.01872	2.1	20	
Uranium	0.0567	0.00030	0.05	0.005627	102	70	130	0.05628	0.8	20	
Vanadium	0.0513	0.010	0.05	0.002041	99	70	130	0.05031	2.0	20	
Zinc	0.107	0.010	0.05	0.05442	106	70	130	0.105	2.1	20	

Associated samples: **H14030371-001B; H14030371-002B; H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140328B: 228** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/29/14 02:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.6	0.10	40		94	70	130				
Antimony	0.000123	0.050									
Arsenic	0.000162	0.0050									
Barium	0.000169	0.10									
Beryllium	-1.50E-05	0.0010									
Cadmium	0.000692	0.0010									
Calcium	110	0.50	120		91	70	130				
Chromium	0.00103	0.010									
Cobalt	0.000401	0.010									
Copper	0.000324	0.010									
Iron	99.2	0.020	100		99	70	130				
Lead	0.000234	0.010									
Magnesium	40.5	0.50	40		101	70	130				
Manganese	9.80E-05	0.010									
Molybdenum	0.732	0.0050	0.8		91	70	130				
Nickel	0.000254	0.010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 228** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/29/14 02:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	40.1	0.50	40		100	70	130				
Selenium	0.000525	0.0050									
Silver	0.000215	0.0050									
Sodium	102	0.50	100		102	70	130				
Uranium	2.00E-06	0.0010									
Vanadium	8.00E-05	0.10									
Zinc	0.00165	0.010									

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Run ID :Run Order: **ICPMS204-B_140328B: 229** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/29/14 03:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.1	0.10	40		95	70	130				
Antimony	0.000194	0.050				0	0				
Arsenic	0.00994	0.0050	0.01		99	70	130				
Barium	0.000191	0.10				0	0				
Beryllium	-1.10E-05	0.0010				0	0				
Cadmium	0.0102	0.0010	0.01		102	70	130				
Calcium	107	0.50	120		89	70	130				
Chromium	0.0209	0.010	0.02		105	70	130				
Cobalt	0.0214	0.010	0.02		107	70	130				
Copper	0.0196	0.010	0.02		98	70	130				
Iron	99.2	0.020	100		99	70	130				
Lead	0.000247	0.010				0	0				
Magnesium	40.1	0.50	40		100	70	130				
Manganese	0.0218	0.010	0.02		109	70	130				
Molybdenum	0.729	0.0050	0.8		91	70	130				
Nickel	0.0200	0.010	0.02		100	70	130				
Potassium	39.0	0.50	40		98	70	130				
Selenium	0.0100	0.0050	0.01		100	70	130				
Silver	0.0189	0.0050	0.02		94	70	130				
Sodium	100	0.50	100		100	70	130				
Uranium	2.00E-06	0.0010				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 229** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/29/14 03:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 23	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	0.0202	0.10	0.02		101	70	130				
Zinc	0.0112	0.010	0.01		112	70	130				

Associated samples: **H14030371-001B; H14030371-001C; H14030371-002B; H14030371-002C; H14030371-003B; H14030371-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95902

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140331A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**
Analysis Date: **03/31/14 10:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.808	0.10	0.8		101	95	105				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**
Analysis Date: **03/31/14 10:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.57	0.10	2.5		103	95	105				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **03/31/14 10:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	-0.00720	0.10				0	0				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **03/31/14 10:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.03	0.10	1		103	80	120				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Run ID :Run Order: **ICP2-HE_140331A: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **03/31/14 12:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.75	0.10	2.5		110	90	110				

Associated samples: **H14030371-001C; H14030371-002C; H14030371-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95936

Date: *18-Apr-14*

Run ID :Run Order: **FIA203-HE_140401B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **04/01/14 13:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.467	0.10	0.5		93	90	110				

Associated samples: **H14030371-003A**

Run ID :Run Order: **FIA203-HE_140401B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **04/01/14 13:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0680	0.10				0	0				

Associated samples: **H14030371-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95949

Date: *18-Apr-14*

Run ID :Run Order: **IC102-H_140401A: 13** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **04/01/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	99	1.0	100		99	90	110				
Sulfate	400	1.0	400		99	90	110				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **IC102-H_140401A: 14** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **04/01/14 10:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.008									
Sulfate	ND	0.08									

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **IC102-H_140401A: 15** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **04/01/14 11:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	50	1.0	50		100	90	110				
Sulfate	210	1.0	200		104	90	110				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **IC102-H_140401A: 30** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV040114-1** Method: **E300.0**
Analysis Date: **04/01/14 13:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	430	1.0	400		108	90	110				

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **IC102-H_140401A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14030353-013AMS** Method: **E300.0**
Analysis Date: **04/01/14 14:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	1100	1.0	1000	22.4	108	90	110				
Sulfate	7300	2.3	4000	2932	108	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95949

Date: *18-Apr-14*

Run ID :Run Order: **IC102-H_140401A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14030353-013AMS** Method: **E300.0**

Analysis Date: **04/01/14 14:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030371-001A; H14030371-002A**

Run ID :Run Order: **IC102-H_140401A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030353-013AMSD** Method: **E300.0**

Analysis Date: **04/01/14 14:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	1100	1.0	1000	22.4	105	90	110	1107	3.4	20	
Sulfate	7000	2.3	4000	2932	103	90	110	7267	3.0	20	

Associated samples: **H14030371-001A; H14030371-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95960

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140401B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **04/01/14 16:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.304	0.010	0.3		101	90	110				

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **04/01/14 16:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.000244	0.010									

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **04/01/14 16:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.0202	0.010	0.02		101	70	130				

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 20** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**
Analysis Date: **04/01/14 17:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	ND	2E-05									

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 21** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**
Analysis Date: **04/01/14 17:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.0509	0.010	0.05		102	85	115				

Associated samples: **H14030371-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95960

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140401B: 28** SampType: **Sample Matrix Spike** Lab ID: **H14030371-003BMS** Method: **E200.8**
Analysis Date: **04/01/14 18:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.0513	0.0010	0.05	0.001533	**100**	70	130				

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 29** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-003BMSD** Method: **E200.8**
Analysis Date: **04/01/14 18:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.0524	0.0010	0.05	0.001533	**102**	70	130	0.05132	**2.2**	20	

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 181** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **04/02/14 05:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.000619	0.010									

Associated samples: **H14030371-003B**

Run ID :Run Order: **ICPMS204-B_140401B: 182** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **04/02/14 05:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.0205	0.010	0.02		**102**	70	130				

Associated samples: **H14030371-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96086

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/07/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.29	0.10	4		107	90	110				
Arsenic	0.840	0.0085	0.8		105	90	110				
Barium	0.848	0.10	0.8		106	90	110				
Beryllium	0.416	0.0010	0.4		104	90	110				
Boron	0.826	0.10	0.8		103	90	110				
Cadmium	0.404	0.0010	0.4		101	90	110				
Chromium	0.810	0.010	0.8		101	90	110				
Cobalt	0.810	0.010	0.8		101	90	110				
Copper	0.841	0.010	0.8		105	90	110				
Iron	4.08	0.020	4		102	90	110				
Lead	0.807	0.010	0.8		101	90	110				
Manganese	4.07	0.010	4		102	90	110				
Nickel	0.791	0.010	0.8		99	90	110				
Vanadium	0.829	0.10	0.8		104	90	110				
Zinc	0.822	0.010	0.8		103	90	110				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/07/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	533	0.10	500		107	80	120				
Arsenic	0.00856	0.0085				0	0				
Barium	-0.000170	0.10				0	0				
Beryllium	7.00E-05	0.0010				0	0				
Boron	-0.00568	0.10				0	0				
Cadmium	-0.000880	0.0010				0	0				
Chromium	-0.000280	0.013				0	0				
Cobalt	-0.0143	0.010				0	0				
Copper	-0.00343	0.010				0	0				
Iron	186	0.020	200		93	80	120				
Lead	-0.0336	0.010				0	0				
Manganese	-0.0249	0.010				0	0				
Nickel	0.00534	0.010				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96086

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/07/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	ND	0.10				0	0				
Zinc	-0.00145	0.010				0	0				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Run ID :Run Order: **ICP2-HE_140407B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/07/14 10:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	548	0.10	500		110	80	120				
Arsenic	1.01	0.0085	1		101	80	120				
Barium	0.536	0.10	0.5		107	80	120				
Beryllium	0.509	0.0010	0.5		102	80	120				
Boron	1.01	0.10	1		101	80	120				
Cadmium	0.941	0.0010	1		94	80	120				
Chromium	0.489	0.013	0.5		98	80	120				
Cobalt	0.467	0.010	0.5		93	80	120				
Copper	0.530	0.010	0.5		106	80	120				
Iron	191	0.020	200		96	80	120				
Lead	0.965	0.010	1		96	80	120				
Manganese	0.468	0.010	0.5		94	80	120				
Nickel	0.932	0.010	1		93	80	120				
Vanadium	0.494	0.10	0.5		99	80	120				
Zinc	1.03	0.010	1		103	80	120				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96095

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 27** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/07/14 12:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0598	0.0010	0.06		100	90	110				
Arsenic	0.0595	0.0010	0.06		99	90	110				
Cadmium	0.0316	0.0010	0.03		105	90	110				
Lead	0.0618	0.0010	0.06		103	90	110				
Molybdenum	0.0580	0.0010	0.06		97	90	110				
Selenium	0.0605	0.0010	0.06		101	90	110				
Silver	0.0304	0.0010	0.03		101	90	110				
Uranium	0.0587	0.00030	0.06		98	90	110				

Associated samples: **H14030371-004A; H14030371-004B; H14030371-007A; H14030371-007B; H14030371-010A; H14030371-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96114

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/08/14 11:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.09	0.10	4		102	90	110				
Arsenic	0.782	0.0085	0.8		98	90	110				
Barium	0.819	0.10	0.8		102	90	110				
Beryllium	0.414	0.0010	0.4		104	90	110				
Boron	0.778	0.10	0.8		97	90	110				
Chromium	0.778	0.010	0.8		97	90	110				
Cobalt	0.791	0.010	0.8		99	90	110				
Copper	0.811	0.010	0.8		101	90	110				
Iron	4.03	0.020	4		101	90	110				
Lead	0.746	0.010	0.8		93	90	110				
Manganese	4.01	0.010	4		100	90	110				
Nickel	0.756	0.010	0.8		94	90	110				
Vanadium	0.821	0.10	0.8		103	90	110				
Zinc	0.766	0.010	0.8		96	90	110				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140408C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/08/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	514	0.10	500		103	80	120				
Arsenic	0.00151	0.0085				0	0				
Barium	0.000190	0.10				0	0				
Beryllium	2.00E-05	0.0010				0	0				
Boron	-0.0106	0.10				0	0				
Chromium	0.00642	0.010				0	0				
Cobalt	-0.00753	0.010				0	0				
Copper	0.00477	0.010				0	0				
Iron	189	0.020	200		94	80	120				
Lead	-0.0123	0.010				0	0				
Manganese	-0.0257	0.010				0	0				
Nickel	0.00775	0.010				0	0				
Vanadium	0.000960	0.10				0	0				
Zinc	-0.00287	0.010				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96114

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/08/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Associated samples: **H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140408C: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/08/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	524	0.10	500		105	80	120				
Arsenic	0.983	0.0085	1		98	80	120				
Barium	0.503	0.10	0.5		101	80	120				
Beryllium	0.503	0.0010	0.5		101	80	120				
Boron	0.989	0.10	1		99	80	120				
Chromium	0.484	0.010	0.5		97	80	120				
Cobalt	0.458	0.010	0.5		92	80	120				
Copper	0.507	0.010	0.5		101	80	120				
Iron	190	0.020	200		95	80	120				
Lead	0.906	0.010	1		91	80	120				
Manganese	0.465	0.010	0.5		93	80	120				
Nickel	0.924	0.010	1		92	80	120				
Vanadium	0.495	0.10	0.5		99	80	120				
Zinc	0.993	0.010	1		99	80	120				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-006A; H14030371-006B; H14030371-008A; H14030371-008B; H14030371-009A; H14030371-009B; H14030371-011A; H14030371-011B; H14030371-012A; H14030371-012B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96127

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/08/14 17:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0604	0.050	0.06		101	90	110				
Arsenic	0.0602	0.0050	0.06		100	90	110				
Cadmium	0.0314	0.0010	0.03		105	90	110				
Lead	0.0622	0.010	0.06		104	90	110				
Molybdenum	0.0600	0.0050	0.06		100	90	110				
Selenium	0.0606	0.0050	0.06		101	90	110				
Silver	0.0310	0.0050	0.03		103	90	110				
Uranium	0.0619	0.0010	0.06		103	90	110				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96198

Date: *18-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411A: 31** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/10/14 18:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0606	0.0010	0.06		101	90	110				
Barium	0.0618	0.0010	0.06		103	90	110				
Cadmium	0.0324	0.0010	0.03		108	90	110				
Lead	0.0629	0.0010	0.06		105	90	110				
Molybdenum	0.0602	0.0010	0.06		100	90	110				
Selenium	0.0614	0.0010	0.06		102	90	110				
Silver	0.0304	0.0010	0.03		101	90	110				
Uranium	0.0600	0.00030	0.06		100	90	110				
Zinc	0.0632	0.0010	0.06		105	90	110				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Run ID :Run Order: **ICPMS204-B_140411A: 92** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/10/14 23:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0632	0.0010	0.06		105	90	110				
Barium	0.0606	0.0010	0.06		101	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Lead	0.0635	0.0010	0.06		106	90	110				
Molybdenum	0.0603	0.0010	0.06		100	90	110				
Selenium	0.0597	0.0010	0.06		100	90	110				
Silver	0.0305	0.0010	0.03		102	90	110				
Uranium	0.0586	0.00030	0.06		98	90	110				
Zinc	0.0610	0.0010	0.06		102	90	110				

Associated samples: **H14030371-005A; H14030371-005B; H14030371-008A; H14030371-008B; H14030371-011A; H14030371-011B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96211

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**
Analysis Date: **04/11/14 09:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.840	0.0085	0.8		105	90	110				

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **04/11/14 10:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.00100	0.0085				0	0				

Associated samples: **H14030371-009A; H14030371-009B**

Run ID :Run Order: **ICP2-HE_140411A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **04/11/14 10:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.994	0.0085	1		99	80	120				

Associated samples: **H14030371-009A; H14030371-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96228

Date: *18-Apr-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 2** SampType: **Sample Duplicate** Lab ID: **H14030371-004BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	53.2	0.20						51.9			

Associated samples: **H14030371-004B; H14030371-005B; H14030371-006B; H14030371-007B; H14030371-008B; H14030371-009B; H14030371-010B; H14030371-011B; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96331

Date: *18-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/16/14 16:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.799	0.010	0.8		100	90	110				
Iron	3.95	0.020	4		99	90	110				
Zinc	0.776	0.010	0.8		97	90	110				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/16/14 17:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.00192	0.010				0	0				
Iron	187	0.020	200		94	80	120				
Zinc	-0.00249	0.010				0	0				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Run ID :Run Order: **ICP2-HE_140416D: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/16/14 17:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.512	0.010	0.5		102	80	120				
Iron	184	0.020	200		92	80	120				
Zinc	0.978	0.010	1		98	80	120				

Associated samples: **H14030371-006A; H14030371-006B; H14030371-009A; H14030371-009B; H14030371-012A; H14030371-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14030371
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140331A

Date: *18-Apr-14*

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 1** SampType: **Method Blank** Lab ID: **MB-1_140331A** Method: **A2540 D**
Analysis Date: **03/31/14 10:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 3** SampType: **Sample Duplicate** Lab ID: **H14030321-001B DUP** Method: **A2540 D**
Analysis Date: **03/31/14 10:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	10								5	

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_140331A** Method: **A2540 D**
Analysis Date: **03/31/14 10:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	80.0	10	100		**80**	80	120				

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 1** SampType: **Sample Duplicate** Lab ID: **H14030368-002B DUP** Method: **A2540 D**
Analysis Date: **03/31/14 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	137	10						133.3	**2.5**	5	

Associated samples: **H14030371-001A; H14030371-002A; H14030371-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

Natural Resource Damage Program H14030371

Login completed by: Tracy L. Lorash
Date Received: 3/26/2014
Reviewed by: BL2000\jweidemoyer
Received by: wjj
Reviewed Date: 3/28/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Time reliquished by client does not match time received in lab.
Per client request, the temperature for cooler 1 was taken using a client sample.
Cooler 1 was received at 1.3°C, Cooler 2 at 1.3°C, Cooler 3 at 7.0°C, Cooler 4 at 5.0°C. Samples in coolers 1 & 2 were received on wet ice and samples in coolers 3 & 4 were not received on ice. TI 3/27/14

ANALYTICAL SUMMARY REPORT

May 16, 2014

MT DEQ-Federal Superfund
PO Box 200901
Helena, MT 59620-0901

Work Order: H14030374 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 66 samples for MT DEQ-Federal Superfund on 3/26/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14030374-001	SS-06G	03/25/14 16:00	03/26/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14030374-002	SS-07	03/25/14 15:00	03/26/14	Aqueous	Same As Above
H14030374-003	SS-08	03/25/14 13:30	03/26/14	Aqueous	Same As Above
H14030374-004	Field Duplicate #2(SS-08)	03/25/14 13:00	03/26/14	Aqueous	Same As Above
H14030374-005	Field Blank #2	03/25/14 13:00	03/26/14	Aqueous	Same As Above
H14030374-006	SS-10A	03/25/14 11:30	03/26/14	Aqueous	Same As Above
H14030374-007	SS-10B	03/25/14 10:30	03/26/14	Aqueous	Same As Above
H14030374-008	SS-11C	03/25/14 10:30	03/26/14	Aqueous	Same As Above
H14030374-009	SS-11D	03/25/14 9:30	03/26/14	Aqueous	Same As Above
H14030374-010	SS-13	03/24/14 17:30	03/26/14	Aqueous	Same As Above
H14030374-011	Field Duplicate #1 (SS-13)	03/24/14 17:30	03/26/14	Aqueous	Same As Above
H14030374-012	Field Blank #1	03/24/14 18:30	03/26/14	Aqueous	Same As Above
H14030374-013	SS-14	03/24/14 16:00	03/26/14	Aqueous	Same As Above
H14030374-014	SS-15A	03/24/14 14:30	03/26/14	Aqueous	Same As Above
H14030374-015	SS-15B	03/24/14 13:00	03/26/14	Aqueous	Same As Above
H14030374-016	SS-16B	03/24/14 11:00	03/26/14	Aqueous	Same As Above
H14030374-017	SS-17D	03/24/14 10:00	03/26/14	Aqueous	Same As Above
H14030374-018	SS-19	03/24/14 9:00	03/26/14	Aqueous	Same As Above

ANALYTICAL SUMMARY REPORT

H14030374-019	SS-06G Sediment Sieve <0.065mm	03/25/14 16:00	03/26/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14030374-020	SS-06G Sediment Sieve 0.065-1mm	03/25/14 16:00	03/26/14	Sediment	Same As Above
H14030374-021	SS-06G Sediment Sieve 1-2mm	03/25/14 16:00	03/26/14	Sediment	Same As Above
H14030374-022	SS-07 Sediment Sieve <0.065mm	03/25/14 15:00	03/26/14	Sediment	Same As Above
H14030374-023	SS-07 Sediment Sieve 0.065-1mm	03/25/14 15:00	03/26/14	Sediment	Same As Above
H14030374-024	SS-07 Sediment Sieve 1-2mm	03/25/14 15:00	03/26/14	Sediment	Same As Above
H14030374-025	SS-08 Sediment Sieve <0.065mm	03/25/14 13:30	03/26/14	Sediment	Same As Above
H14030374-026	SS-08 Sediment Sieve 0.065-1mm	03/25/14 13:30	03/26/14	Sediment	Same As Above
H14030374-027	SS-08 Sediment Sieve 1-2mm	03/25/14 13:30	03/26/14	Sediment	Same As Above
H14030374-028	SS-10A Sediment Sieve <0.065mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-029	SS-10A Sediment Sieve 0.065-1mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-030	SS-10A Sediment Sieve 1-2mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-031	SS-10A Duplicate #1 Sediment Sieve <0.065mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-032	SS-10A Duplicate #1 Sediment Sieve 0.065-1mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-033	SS-10A Duplicate #1 Sediment Sieve 1-2mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-034	SS-10A Duplicate #2 Sediment Sieve <0.065mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-035	SS-10A Duplicate #2 Sediment Sieve 0.065-1mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-036	SS-10A Duplicate #2 Sediment Sieve 1-2mm	03/25/14 11:30	03/26/14	Sediment	Same As Above
H14030374-037	SS-10B Sediment Sieve <0.065mm	03/25/14 10:30	03/26/14	Sediment	Same As Above
H14030374-038	SS-10B Sediment Sieve 0.065-1mm	03/25/14 10:30	03/26/14	Sediment	Same As Above
H14030374-039	SS-10B Sediment Sieve 1-2mm	03/25/14 10:30	03/26/14	Sediment	Same As Above
H14030374-040	SS-11C Sediment Sieve <0.065mm	03/25/14 10:30	03/26/14	Sediment	Same As Above
H14030374-041	SS-11C Sediment Sieve 0.065-1mm	03/25/14 10:30	03/26/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14030374-042	SS-11C Sediment Sieve 1-2mm	03/25/14 10:30	03/26/14	Sediment	Same As Above
H14030374-043	SS-11D Sediment Sieve <0.065mm	03/25/14 9:30	03/26/14	Sediment	Same As Above
H14030374-044	SS-11D Sediment Sieve 0.065-1mm	03/25/14 9:30	03/26/14	Sediment	Same As Above
H14030374-045	SS-11D Sediment Sieve 1-2mm	03/25/14 9:30	03/26/14	Sediment	Same As Above
H14030374-046	SS-13 Sediment Sieve <0.065mm	03/24/14 17:30	03/26/14	Sediment	Same As Above
H14030374-047	SS-13 Sediment Sieve 0.065-1mm	03/24/14 17:30	03/26/14	Sediment	Same As Above
H14030374-048	SS-13 Sediment Sieve 1-2mm	03/24/14 17:30	03/26/14	Sediment	Same As Above
H14030374-049	SS-14 Sediment Sieve <0.065mm	03/24/14 16:00	03/26/14	Sediment	Same As Above
H14030374-050	SS-14 Sediment Sieve 0.065-1mm	03/24/14 16:00	03/26/14	Sediment	Same As Above
H14030374-051	SS-14 Sediment Sieve 1-2mm	03/24/14 16:00	03/26/14	Sediment	Same As Above
H14030374-052	SS-15A Sediment Sieve <0.065mm	03/24/14 14:30	03/26/14	Sediment	Same As Above
H14030374-053	SS-15A Sediment Sieve 0.065-1mm	03/24/14 14:30	03/26/14	Sediment	Same As Above
H14030374-054	SS-15A Sediment Sieve 1-2mm	03/24/14 14:30	03/26/14	Sediment	Same As Above
H14030374-055	SS-15B Sediment Sieve <0.065mm	03/24/14 13:00	03/26/14	Sediment	Same As Above
H14030374-056	SS-15B Sediment Sieve 0.065-1mm	03/24/14 13:00	03/26/14	Sediment	Same As Above
H14030374-057	SS-15B Sediment Sieve 1-2mm	03/24/14 13:00	03/26/14	Sediment	Same As Above
H14030374-058	SS-16B Sediment Sieve <0.065mm	03/24/14 11:00	03/26/14	Sediment	Same As Above
H14030374-059	SS-16B Sediment Sieve 0.065-1mm	03/24/14 11:00	03/26/14	Sediment	Same As Above
H14030374-060	SS-16B Sediment Sieve 1-2mm	03/24/14 11:00	03/26/14	Sediment	Same As Above
H14030374-061	SS-17D Sediment Sieve <0.065mm	03/24/14 10:00	03/26/14	Sediment	Same As Above
H14030374-062	SS-17D Sediment Sieve 0.065-1mm	03/24/14 10:00	03/26/14	Sediment	Same As Above
H14030374-063	SS-17D Sediment Sieve 1-2mm	03/24/14 10:00	03/26/14	Sediment	Same As Above
H14030374-064	SS-19 Sediment Sieve <0.065mm	03/24/14 9:00	03/26/14	Sediment	Same As Above
H14030374-065	SS-19 Sediment Sieve 0.065-1mm	03/24/14 9:00	03/26/14	Sediment	Same As Above
H14030374-066	SS-19 Sediment Sieve 1-2mm	03/24/14 9:00	03/26/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

CLIENT: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Work Order: H14030374

Revised Date: 05/16/14
Report Date: 04/24/14

CASE NARRATIVE

Per client request, the reporting limit for Copper on the aqueous samples was changed to 0.001 mg/L. Abb 5/16/14

Per email from E.Weber, Sb, Cd, Mo, Se, Ag, and U were reported on a dry weight basis. The samples should have been reported as both dry weight and wet weight for samples H14030374-063 (SS-17D Sediment Sieve 1-2mm) and -066 (SS-19 Sediment Sieve 1-2mm). This was due to a moisture correction factor erroneously applied to that sample fraction. The moisture correction factor was removed and the results were recalculated. The report was revised to report these analytes on an as received basis. Abb 5/19/14

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14030374-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	2	mg/L		1		A2540 D	03/31/14 10:20 / SR		I24 (14410200)_140331A	19	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	03/27/14 21:24 / SR		MAN-TECH_140327B	69	R95860
Bicarbonate as HCO3	120	mg/L		4		A2320 B	03/27/14 21:24 / SR		MAN-TECH_140327B	69	R95860
Chloride	34	mg/L		1		E300.0	04/01/14 14:50 / abb		IC102-H_140401A	37	R95949
Sulfate	96	mg/L		1		E300.0	04/01/14 14:50 / abb		IC102-H_140401A	37	R95949
Hardness as CaCO3	177	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	5	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	03/31/14 09:54 / cm		FIA203-HE_140331A	35	R95894
Nitrogen, Nitrate+Nitrite as N	1.06	mg/L		0.05		E353.2	03/27/14 13:14 / cm		FIA203-HE_140327A	38	R95844
Nitrogen, Total	1.42	mg/L		0.05		A4500 N-C	04/01/14 14:03 / cm	04/01/14 09:17	FIA203-HE_140401B	14	24037
Phosphorus, Total as P	0.077	mg/L		0.005		E365.1	03/28/14 10:15 / cm	03/28/14 08:23	FIA202-HE_140328A	20	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Barium	0.050	mg/L		0.003		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:03 / sld		ICP2-HE_140327A	23	R95851
Cadmium	0.00008	mg/L		0.00003		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Calcium	50	mg/L		1		E200.7	03/27/14 10:03 / sld		ICP2-HE_140327A	23	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Copper	0.005	mg/L		0.001		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Iron	0.13	mg/L		0.02		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Magnesium	14	mg/L		1		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Manganese	0.157	mg/L		0.001		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:35 / sbk	03/27/14 09:45	HGCV202-H_140328B	43	23976

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14030374-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Potassium	4	mg/L		1		E200.7	03/27/14 10:03 / sld		ICP2-HE_140327A	23	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Sodium	21	mg/L		1		E200.7	03/27/14 10:03 / sld		ICP2-HE_140327A	23	R95851
Uranium	0.0065	mg/L		0.0002		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
Zinc	0.021	mg/L		0.008		E200.8	03/28/14 19:32 / dck		ICPMS204-B_140328B	126	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.070	mg/L		0.009		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Barium	0.046	mg/L		0.003		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Cadmium	0.00015	mg/L		0.00003		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Calcium	48	mg/L		1		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Copper	0.008	mg/L		0.001		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Iron	0.37	mg/L		0.02		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Lead	0.0014	mg/L		0.0003		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Magnesium	14	mg/L		1		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Manganese	0.172	mg/L		0.001		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Mercury	5.2E-06	mg/L		5E-06		E245.1	03/28/14 12:39 / sbk	03/27/14 09:45	HGCV202-H_140328B	44	23976
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Potassium	4	mg/L		1		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	133	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14030374-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	22	mg/L		1		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 133	23989
Uranium	0.0068	mg/L		0.0002		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 133	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 133	23989
Zinc	0.032	mg/L		0.008		E200.8	03/28/14 20:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 133	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14030374-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	2	mg/L		1		A2540 D	03/31/14 10:21 / SR		I24 (14410200)_140331A	20	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	03/27/14 21:31 / SR		MAN-TECH_140327B	70	R95860
Bicarbonate as HCO3	140	mg/L		4		A2320 B	03/27/14 21:31 / SR		MAN-TECH_140327B	70	R95860
Chloride	43	mg/L		1		E300.0	04/01/14 15:00 / abb		IC102-H_140401A	38	R95949
Sulfate	81	mg/L		1		E300.0	04/01/14 15:00 / abb		IC102-H_140401A	38	R95949
Hardness as CaCO3	160	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	6	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	6.2	mg/L	D	0.5		E350.1	03/31/14 10:40 / cm		FIA203-HE_140331A	74	R95894
Nitrogen, Nitrate+Nitrite as N	0.84	mg/L		0.05		E353.2	03/27/14 13:15 / cm		FIA203-HE_140327A	39	R95844
Nitrogen, Total	8.1	mg/L	D	0.3		A4500 N-C	04/01/14 14:04 / cm	04/01/14 09:17	FIA203-HE_140401B	15	24037
Phosphorus, Total as P	0.725	mg/L		0.005		E365.1	03/28/14 10:16 / cm	03/28/14 08:23	FIA202-HE_140328A	21	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Arsenic	0.004	mg/L		0.001		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Barium	0.047	mg/L		0.003		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:07 / sld		ICP2-HE_140327A	24	R95851
Cadmium	0.00010	mg/L		0.00003		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Calcium	44	mg/L		1		E200.7	03/27/14 10:07 / sld		ICP2-HE_140327A	24	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Copper	0.008	mg/L		0.001		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Iron	0.12	mg/L		0.02		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Lead	0.0007	mg/L		0.0003		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Magnesium	13	mg/L		1		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Manganese	0.140	mg/L		0.001		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:43 / sbk	03/27/14 09:45	HGCV202-H_140328B	45	23976

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14030374-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:07 / sld		ICP2-HE_140327A	24	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Sodium	26	mg/L		1		E200.7	03/27/14 10:07 / sld		ICP2-HE_140327A	24	R95851
Uranium	0.0055	mg/L		0.0002		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
Zinc	0.047	mg/L		0.008		E200.8	03/28/14 20:18 / dck		ICPMS204-B_140328B	137	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.069	mg/L		0.009		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Barium	0.041	mg/L		0.003		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Cadmium	0.00015	mg/L		0.00003		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Calcium	43	mg/L		1		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Copper	0.012	mg/L		0.001		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Iron	0.30	mg/L		0.02		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Lead	0.0014	mg/L		0.0003		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Manganese	0.150	mg/L		0.001		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Mercury	5.8E-06	mg/L		5E-06		E245.1	03/28/14 12:48 / sbk	03/27/14 09:45	HGCV202-H_140328B	46	23976
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Potassium	6	mg/L		1		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14030374-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	27	mg/L		1		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Uranium	0.0059	mg/L		0.0002		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989
Zinc	0.049	mg/L		0.008		E200.8	03/28/14 20:23 / dck	03/27/14 07:58	ICPMS204-B_140328B	138	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14030374-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	8	mg/L		1		A2540 D	03/31/14 10:21 / SR		I24 (14410200)_140331A	21	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	03/27/14 21:39 / SR		MAN-TECH_140327B	71	R95860
Bicarbonate as HCO3	140	mg/L		4		A2320 B	03/27/14 21:39 / SR		MAN-TECH_140327B	71	R95860
Chloride	39	mg/L		1		E300.0	03/27/14 20:42 / abb		IC102-H_140327A	66	R95852
Sulfate	89	mg/L		1		E300.0	03/27/14 20:42 / abb		IC102-H_140327A	66	R95852
Hardness as CaCO3	160	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	7	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	3.9	mg/L	D	0.5		E350.1	03/31/14 10:13 / cm		FIA203-HE_140331A	51	R95894
Nitrogen, Nitrate+Nitrite as N	1.25	mg/L		0.05		E353.2	03/27/14 13:20 / cm		FIA203-HE_140327A	43	R95844
Nitrogen, Total	7.4	mg/L	D	0.3		A4500 N-C	04/21/14 12:19 / cm	04/18/14 14:09	FIA203-HE_140421B	13	24251
Phosphorus, Total as P	0.450	mg/L		0.005		E365.1	03/28/14 10:17 / cm	03/28/14 08:23	FIA202-HE_140328A	22	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Barium	0.050	mg/L		0.003		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:11 / sld		ICP2-HE_140327A	25	R95851
Cadmium	0.00024	mg/L		0.00003		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Calcium	46	mg/L		1		E200.7	03/27/14 10:11 / sld		ICP2-HE_140327A	25	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Copper	0.010	mg/L		0.001		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Iron	0.17	mg/L		0.02		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Lead	0.0005	mg/L		0.0003		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Magnesium	13	mg/L		1		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Manganese	0.214	mg/L		0.001		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 12:52 / sbk	03/27/14 09:45	HGCV202-H_140328B	47	23976

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14030374-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:11 / sld		ICP2-HE_140327A	25	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Sodium	26	mg/L		1		E200.7	03/27/14 10:11 / sld		ICP2-HE_140327A	25	R95851
Uranium	0.0057	mg/L		0.0002		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
Zinc	0.057	mg/L		0.008		E200.8	03/28/14 20:27 / dck		ICPMS204-B_140328B	139	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.099	mg/L		0.009		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Barium	0.042	mg/L		0.003		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Cadmium	0.00025	mg/L		0.00003		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Calcium	43	mg/L		1		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Copper	0.016	mg/L		0.001		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Iron	0.39	mg/L		0.02		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Lead	0.0023	mg/L		0.0003		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Manganese	0.226	mg/L		0.001		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Mercury	0.000011	mg/L		5E-06		E245.1	03/28/14 13:05 / sbk	03/27/14 09:45	HGCV202-H_140328B	50	23976
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Potassium	6	mg/L		1		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14030374-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	27	mg/L		1		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Uranium	0.0060	mg/L		0.0002		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989
Zinc	0.071	mg/L		0.008		E200.8	03/28/14 20:31 / dck	03/27/14 07:58	ICPMS204-B_140328B	140	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #2(SS-08)
Lab ID: H14030374-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:00 **DateReceived:** 03/26/14
Report Date: 04/24/14 **Revised Date:** 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	03/31/14 10:22 / SR		I24 (14410200)_140331A	22	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	03/27/14 21:46 / SR		MAN-TECH_140327B	72	R95860
Bicarbonate as HCO3	140	mg/L		4		A2320 B	03/27/14 21:46 / SR		MAN-TECH_140327B	72	R95860
Chloride	38	mg/L		1		E300.0	04/01/14 15:10 / abb		IC102-H_140401A	39	R95949
Sulfate	85	mg/L		1		E300.0	04/01/14 15:10 / abb		IC102-H_140401A	39	R95949
Hardness as CaCO3	159	mg/L		1		A2340 B	04/02/14 11:42 / sld		WATERCALC_140402B	1	R95963
NUTRIENTS											
Nitrogen, Ammonia as N	4.2	mg/L	D	0.5		E350.1	03/31/14 10:42 / cm		FIA203-HE_140331A	75	R95894
Nitrogen, Nitrate+Nitrite as N	1.25	mg/L		0.05		E353.2	03/27/14 13:23 / cm		FIA203-HE_140327A	46	R95844
Nitrogen, Total	7.4	mg/L	D	0.3		A4500 N-C	04/01/14 14:06 / cm	04/01/14 09:17	FIA203-HE_140401B	16	24037
Phosphorus, Total as P	0.526	mg/L		0.005		E365.1	03/28/14 10:18 / cm	03/28/14 08:23	FIA202-HE_140328A	23	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Barium	0.048	mg/L		0.003		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:15 / sld		ICP2-HE_140327A	26	R95851
Cadmium	0.00012	mg/L		0.00003		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Calcium	45	mg/L		1		E200.7	03/27/14 10:15 / sld		ICP2-HE_140327A	26	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Copper	0.010	mg/L		0.001		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Iron	0.14	mg/L		0.02		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Lead	0.0005	mg/L		0.0003		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Magnesium	12	mg/L		1		E200.7	03/27/14 10:15 / sld		ICP2-HE_140327A	26	R95851
Manganese	0.200	mg/L		0.001		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 13:09 / sbk	03/27/14 09:45	HGCV202-H_140328B	51	23976

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #2(SS-08)
Lab ID: H14030374-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:15 / sld		ICP2-HE_140327A	26	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Sodium	27	mg/L		1		E200.7	03/27/14 10:15 / sld		ICP2-HE_140327A	26	R95851
Uranium	0.0056	mg/L		0.0002		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
Zinc	0.054	mg/L		0.008		E200.8	03/28/14 20:36 / dck		ICPMS204-B_140328B	141	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.110	mg/L		0.009		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Barium	0.042	mg/L		0.003		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Cadmium	0.00023	mg/L		0.00003		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Calcium	43	mg/L		1		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Copper	0.017	mg/L		0.001		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Iron	0.39	mg/L		0.02		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Lead	0.0023	mg/L		0.0003		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Manganese	0.230	mg/L		0.001		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Mercury	8.8E-06	mg/L		5E-06		E245.1	03/28/14 13:13 / sbk	03/27/14 09:45	HGCV202-H_140328B	52	23976
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Potassium	6	mg/L		1		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Silver	ND	mg/L		0.0002		E200.8	04/01/14 19:55 / dck	03/27/14 07:58	ICPMS204-B_140401B	54	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #2(SS-08)
Lab ID: H14030374-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	27	mg/L		1		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Uranium	0.0061	mg/L		0.0002		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989
Zinc	0.069	mg/L		0.008		E200.8	03/28/14 21:02 / dck	03/27/14 07:58	ICPMS204-B_140328B	147	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #2
Lab ID: H14030374-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	03/31/14 10:22 / SR		I24 (14410200)_140331A	23	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	03/27/14 21:50 / SR		MAN-TECH_140327B	73	R95860
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	03/27/14 21:50 / SR		MAN-TECH_140327B	73	R95860
Chloride	85	mg/L		1		E300.0	03/27/14 21:02 / abb		IC102-H_140327A	68	R95852
Sulfate	ND	mg/L		1		E300.0	03/27/14 21:02 / abb		IC102-H_140327A	68	R95852
Hardness as CaCO3	ND	mg/L		1		A2340 B	03/27/14 10:19 / abb		CALC_140402A	410	R95976
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	03/31/14 10:03 / cm		FIA203-HE_140331A	43	R95894
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	03/27/14 13:25 / cm		FIA203-HE_140327A	47	R95844
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	04/01/14 14:07 / cm	04/01/14 09:17	FIA203-HE_140401B	17	24037
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	03/28/14 10:19 / cm	03/28/14 08:23	FIA202-HE_140328A	24	23999
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Arsenic	ND	mg/L		0.001		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Barium	0.013	mg/L		0.003		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:19 / sld		ICP2-HE_140327A	27	R95851
Cadmium	ND	mg/L		0.00003		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Calcium	ND	mg/L		1		E200.7	03/27/14 10:19 / sld		ICP2-HE_140327A	27	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Copper	ND	mg/L		0.001		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Iron	ND	mg/L		0.02		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Magnesium	ND	mg/L		1		E200.7	03/27/14 10:19 / sld		ICP2-HE_140327A	27	R95851
Manganese	ND	mg/L		0.001		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 13:17 / sbk	03/27/14 09:45	HGCV202-H_140328B	53	23976

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #2
Lab ID: H14030374-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:00 **DateReceived:** 03/26/14
Report Date: 04/24/14 **Revised Date:** 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Potassium	ND	mg/L		1		E200.7	03/27/14 10:19 / sld		ICP2-HE_140327A	27	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Sodium	ND	mg/L		1		E200.7	03/27/14 10:19 / sld		ICP2-HE_140327A	27	R95851
Uranium	ND	mg/L		0.0002		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:06 / dck		ICPMS204-B_140328B	148	R95901
Zinc	ND	mg/L		0.008		E200.8	04/01/14 20:13 / dck		ICPMS204-B_140401B	58	R95960
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Arsenic	ND	mg/L		0.001		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Barium	ND	mg/L		0.003		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Cadmium	ND	mg/L		0.00003		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Calcium	ND	mg/L		1		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Copper	ND	mg/L		0.001		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Iron	ND	mg/L		0.02		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Lead	ND	mg/L		0.0003		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Magnesium	ND	mg/L		1		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Manganese	ND	mg/L		0.001		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 13:22 / sbk	03/27/14 09:45	HGCV202-H_140328B	54	23976
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Potassium	ND	mg/L		1		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	149	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #2
Lab ID: H14030374-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	ND	mg/L		1		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 149	23989
Uranium	ND	mg/L		0.0002		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 149	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 149	23989
Zinc	ND	mg/L		0.008		E200.8	03/28/14 21:11 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 149	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14030374-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	10	mg/L		1		A2540 D	03/31/14 10:22 / SR		I24 (14410200)_140331A	24	TSS140331A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 21:57 / SR		MAN-TECH_140327B	74	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 21:57 / SR		MAN-TECH_140327B	74	R95860
Chloride	36	mg/L		1		E300.0	04/01/14 15:20 / abb		IC102-H_140401A	40	R95949
Sulfate	93	mg/L		1		E300.0	04/01/14 15:20 / abb		IC102-H_140401A	40	R95949
Hardness as CaCO3	168	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	9	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	1.62	mg/L		0.05		E350.1	03/31/14 10:05 / cm		FIA203-HE_140331A	44	R95894
Nitrogen, Nitrate+Nitrite as N	1.49	mg/L		0.05		E353.2	03/27/14 13:26 / cm		FIA203-HE_140327A	48	R95844
Nitrogen, Total	3.98	mg/L	D	0.06		A4500 N-C	04/01/14 14:10 / cm	04/01/14 09:17	FIA203-HE_140401B	20	24037
Phosphorus, Total as P	0.367	mg/L		0.005		E365.1	04/02/14 09:25 / cm	04/01/14 13:12	FIA202-HE_140402B	13	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Barium	0.048	mg/L		0.003		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:22 / sld		ICP2-HE_140327A	28	R95851
Cadmium	0.00015	mg/L		0.00003		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Calcium	48	mg/L		1		E200.7	03/27/14 10:22 / sld		ICP2-HE_140327A	28	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Copper	0.015	mg/L		0.001		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Iron	0.13	mg/L		0.02		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Magnesium	12	mg/L		1		E200.7	03/27/14 10:22 / sld		ICP2-HE_140327A	28	R95851
Manganese	0.228	mg/L		0.001		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 13:26 / sbk	03/27/14 09:45	HGCV202-H_140328B	55	23976

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14030374-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:22 / sld		ICP2-HE_140327A	28	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Sodium	26	mg/L		1		E200.7	03/27/14 10:22 / sld		ICP2-HE_140327A	28	R95851
Uranium	0.0061	mg/L		0.0002		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
Zinc	0.045	mg/L		0.008		E200.8	03/28/14 21:15 / dck		ICPMS204-B_140328B	150	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.126	mg/L		0.009		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Arsenic	0.006	mg/L		0.001		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Barium	0.041	mg/L		0.003		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Cadmium	0.00029	mg/L		0.00003		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Calcium	46	mg/L		1		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Copper	0.024	mg/L		0.001		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Iron	0.41	mg/L		0.02		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Lead	0.0024	mg/L		0.0003		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Manganese	0.248	mg/L		0.001		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Mercury	0.000014	mg/L		5E-06		E245.1	03/28/14 13:39 / sbk	03/27/14 09:45	HGCV202-H_140328B	58	23976
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Potassium	6	mg/L		1		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14030374-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	26	mg/L		1		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Uranium	0.0065	mg/L		0.0002		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989
Zinc	0.063	mg/L		0.008		E200.8	03/28/14 21:20 / dck	03/27/14 07:58	ICPMS204-B_140328B	151	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14030374-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	9	mg/L		1		A2540 D	03/28/14 12:19 / SR		I24 (14410200)_140328A	27	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 22:04 / SR		MAN-TECH_140327B	75	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 22:04 / SR		MAN-TECH_140327B	75	R95860
Chloride	38	mg/L		1		E300.0	03/27/14 21:22 / abb		IC102-H_140327A	70	R95852
Sulfate	96	mg/L		1		E300.0	03/27/14 21:22 / abb		IC102-H_140327A	70	R95852
Hardness as CaCO3	168	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	10	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	1.64	mg/L		0.05		E350.1	03/31/14 10:06 / cm		FIA203-HE_140331A	45	R95894
Nitrogen, Nitrate+Nitrite as N	1.47	mg/L		0.05		E353.2	03/27/14 13:27 / cm		FIA203-HE_140327A	49	R95844
Nitrogen, Total	3.81	mg/L	D	0.06		A4500 N-C	04/01/14 14:12 / cm	04/01/14 09:17	FIA203-HE_140401B	21	24037
Phosphorus, Total as P	0.342	mg/L		0.005		E365.1	04/02/14 09:26 / cm	04/01/14 13:12	FIA202-HE_140402B	14	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Arsenic	0.005	mg/L		0.001		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Barium	0.048	mg/L		0.003		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:26 / sld		ICP2-HE_140327A	29	R95851
Cadmium	0.00015	mg/L		0.00003		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Calcium	48	mg/L		1		E200.7	03/27/14 10:26 / sld		ICP2-HE_140327A	29	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Copper	0.014	mg/L		0.001		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Iron	0.13	mg/L		0.02		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Magnesium	13	mg/L		1		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Manganese	0.240	mg/L		0.001		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 13:43 / sbk	03/27/14 09:45	HGCV202-H_140328B	59	23976

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14030374-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:26 / sld		ICP2-HE_140327A	29	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Sodium	26	mg/L		1		E200.7	03/27/14 10:26 / sld		ICP2-HE_140327A	29	R95851
Uranium	0.0060	mg/L		0.0002		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
Zinc	0.049	mg/L		0.008		E200.8	03/28/14 21:24 / dck		ICPMS204-B_140328B	152	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.120	mg/L		0.009		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Arsenic	0.006	mg/L		0.001		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Barium	0.042	mg/L		0.003		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Cadmium	0.00032	mg/L		0.00003		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Calcium	46	mg/L		1		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Copper	0.025	mg/L		0.001		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Iron	0.40	mg/L		0.02		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Lead	0.0024	mg/L		0.0003		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Manganese	0.255	mg/L		0.001		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Mercury	0.000012	mg/L		5E-06		E245.1	03/28/14 13:47 / sbk	03/27/14 09:45	HGCV202-H_140328B	60	23976
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Potassium	6	mg/L		1		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14030374-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	26	mg/L		1		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Uranium	0.0065	mg/L		0.0002		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989
Zinc	0.071	mg/L		0.008		E200.8	03/28/14 21:28 / dck	03/27/14 07:58	ICPMS204-B_140328B	153	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14030374-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	7	mg/L		1		A2540 D	03/28/14 12:20 / SR		I24 (14410200)_140328A	29	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	03/27/14 22:12 / SR		MAN-TECH_140327B	76	R95860
Bicarbonate as HCO3	140	mg/L		4		A2320 B	03/27/14 22:12 / SR		MAN-TECH_140327B	76	R95860
Chloride	63	mg/L		1		E300.0	04/01/14 15:31 / abb		IC102-H_140401A	41	R95949
Sulfate	99	mg/L		1		E300.0	04/01/14 15:31 / abb		IC102-H_140401A	41	R95949
Hardness as CaCO3	200	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	11	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	2.1	mg/L	D	0.1		E350.1	03/31/14 10:43 / cm		FIA203-HE_140331A	76	R95894
Nitrogen, Nitrate+Nitrite as N	1.29	mg/L		0.05		E353.2	03/27/14 13:28 / cm		FIA203-HE_140327A	50	R95844
Nitrogen, Total	2.15	mg/L	D	0.06		A4500 N-C	03/31/14 15:41 / cm	03/31/14 09:53	FIA203-HE_140331C	47	24021
Phosphorus, Total as P	0.353	mg/L		0.005		E365.1	04/02/14 09:29 / cm	04/01/14 13:12	FIA202-HE_140402B	17	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Barium	0.051	mg/L		0.003		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:30 / sld		ICP2-HE_140327A	30	R95851
Cadmium	0.00019	mg/L		0.00003		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Calcium	60	mg/L		1		E200.7	03/27/14 10:30 / sld		ICP2-HE_140327A	30	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Copper	0.012	mg/L		0.001		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Iron	0.11	mg/L		0.02		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Magnesium	13	mg/L		1		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Manganese	0.311	mg/L		0.001		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 15:33 / sbk	03/27/14 13:05	HGCV202-H_140328B	85	23991

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14030374-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:30 / sld		ICP2-HE_140327A	30	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Sodium	32	mg/L		1		E200.7	03/27/14 10:30 / sld		ICP2-HE_140327A	30	R95851
Uranium	0.0069	mg/L		0.0002		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
Zinc	0.098	mg/L		0.008		E200.8	03/28/14 21:33 / dck		ICPMS204-B_140328B	154	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.147	mg/L		0.009		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Barium	0.048	mg/L		0.003		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Cadmium	0.00036	mg/L		0.00003		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Calcium	57	mg/L		1		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Copper	0.022	mg/L		0.001		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Iron	0.36	mg/L		0.02		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Lead	0.0018	mg/L		0.0003		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Magnesium	14	mg/L		1		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Manganese	0.336	mg/L		0.001		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Mercury	9.1E-06	mg/L		5E-06		E245.1	03/28/14 15:46 / sbk	03/27/14 13:05	HGCV202-H_140328B	88	23991
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Potassium	6	mg/L		1		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14030374-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	32	mg/L		1		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Uranium	0.0073	mg/L		0.0002		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989
Zinc	0.116	mg/L		0.008		E200.8	03/28/14 21:37 / dck	03/27/14 07:58	ICPMS204-B_140328B	155	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14030374-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	9	mg/L		1		A2540 D	03/28/14 12:20 / SR		I24 (14410200)_140328A	30	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	03/27/14 22:19 / SR		MAN-TECH_140327B	77	R95860
Bicarbonate as HCO3	150	mg/L		4		A2320 B	03/27/14 22:19 / SR		MAN-TECH_140327B	77	R95860
Chloride	55	mg/L		1		E300.0	04/01/14 15:41 / abb		IC102-H_140401A	42	R95949
Sulfate	92	mg/L		1		E300.0	04/01/14 15:41 / abb		IC102-H_140401A	42	R95949
Hardness as CaCO3	187	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	12	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	2.1	mg/L	D	0.1		E350.1	03/31/14 10:44 / cm		FIA203-HE_140331A	77	R95894
Nitrogen, Nitrate+Nitrite as N	1.21	mg/L		0.05		E353.2	03/27/14 13:29 / cm		FIA203-HE_140327A	51	R95844
Nitrogen, Total	3.87	mg/L	D	0.06		A4500 N-C	04/01/14 14:13 / cm	04/01/14 09:17	FIA203-HE_140401B	22	24037
Phosphorus, Total as P	0.346	mg/L		0.005		E365.1	04/02/14 09:30 / cm	04/01/14 13:12	FIA202-HE_140402B	18	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Barium	0.051	mg/L		0.003		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:52 / sld		ICP2-HE_140327A	36	R95851
Cadmium	0.00018	mg/L		0.00003		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Calcium	56	mg/L		1		E200.7	03/27/14 10:52 / sld		ICP2-HE_140327A	36	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Copper	0.012	mg/L		0.001		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Iron	0.10	mg/L		0.02		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Lead	0.0003	mg/L		0.0003		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Magnesium	12	mg/L		1		E200.7	03/27/14 10:52 / sld		ICP2-HE_140327A	36	R95851
Manganese	0.292	mg/L		0.001		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Mercury	ND	mg/L		5E-06		E245.1	03/28/14 15:50 / sbk	03/27/14 13:05	HGCV202-H_140328B	89	23991

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14030374-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:52 / sld		ICP2-HE_140327A	36	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Sodium	31	mg/L		1		E200.7	03/27/14 10:52 / sld		ICP2-HE_140327A	36	R95851
Uranium	0.0065	mg/L		0.0002		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
Zinc	0.096	mg/L		0.008		E200.8	03/28/14 21:41 / dck		ICPMS204-B_140328B	156	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.118	mg/L		0.009		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Barium	0.047	mg/L		0.003		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Cadmium	0.00032	mg/L		0.00003		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Calcium	53	mg/L		1		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Copper	0.020	mg/L		0.001		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Iron	0.32	mg/L		0.02		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Lead	0.0016	mg/L		0.0003		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Manganese	0.314	mg/L		0.001		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Mercury	9.9E-06	mg/L		5E-06		E245.1	03/28/14 15:54 / sbk	03/27/14 13:05	HGCV202-H_140328B	90	23991
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Potassium	6	mg/L		1		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	160	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14030374-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	31	mg/L		1		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 160	23989
Uranium	0.0068	mg/L		0.0002		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 160	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 160	23989
Zinc	0.113	mg/L		0.008		E200.8	03/28/14 21:59 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 160	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14030374-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	18	mg/L		1		A2540 D	03/28/14 12:23 / SR		I24 (14410200)_140328A	31	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 22:26 / SR		MAN-TECH_140327B	78	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 22:26 / SR		MAN-TECH_140327B	78	R95860
Chloride	51	mg/L		1		E300.0	03/27/14 22:33 / abb		IC102-H_140327A	77	R95852
Sulfate	96	mg/L		1		E300.0	03/27/14 22:33 / abb		IC102-H_140327A	77	R95852
Hardness as CaCO3	181	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	13	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	0.80	mg/L		0.05		E350.1	03/31/14 10:09 / cm		FIA203-HE_140331A	48	R95894
Nitrogen, Nitrate+Nitrite as N	1.33	mg/L		0.05		E353.2	03/27/14 13:30 / cm		FIA203-HE_140327A	52	R95844
Nitrogen, Total	2.74	mg/L	D	0.06		A4500 N-C	04/01/14 14:14 / cm	04/01/14 09:18	FIA203-HE_140401B	23	24037
Phosphorus, Total as P	0.325	mg/L		0.005		E365.1	04/02/14 09:31 / cm	04/01/14 13:12	FIA202-HE_140402B	19	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Barium	0.048	mg/L		0.003		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:55 / sld		ICP2-HE_140327A	37	R95851
Cadmium	0.00012	mg/L		0.00003		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Calcium	54	mg/L		1		E200.7	03/27/14 10:55 / sld		ICP2-HE_140327A	37	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Copper	0.010	mg/L		0.001		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Iron	0.09	mg/L		0.02		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Lead	0.0003	mg/L		0.0003		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Magnesium	12	mg/L		1		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Manganese	0.221	mg/L		0.001		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 12:24 / sbk	03/31/14 08:00	HGCV202-H_140401A	17	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14030374-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:55 / sld		ICP2-HE_140327A	37	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Sodium	29	mg/L		1		E200.7	03/27/14 10:55 / sld		ICP2-HE_140327A	37	R95851
Uranium	0.0062	mg/L		0.0002		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
Zinc	0.034	mg/L		0.008		E200.8	03/28/14 22:03 / dck		ICPMS204-B_140328B	161	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.289	mg/L		0.009		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Barium	0.046	mg/L		0.003		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Cadmium	0.00038	mg/L		0.00003		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Calcium	52	mg/L		1		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Copper	0.024	mg/L		0.001		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Iron	0.56	mg/L		0.02		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Lead	0.0034	mg/L		0.0003		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Manganese	0.265	mg/L		0.001		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Mercury	0.000014	mg/L		5E-06		E245.1	04/01/14 12:29 / sbk	03/31/14 08:00	HGCV202-H_140401A	18	24011
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Potassium	6	mg/L		1		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14030374-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Uranium	0.0066	mg/L		0.0002		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989
Zinc	0.080	mg/L		0.008		E200.8	03/28/14 22:08 / dck	03/27/14 07:58	ICPMS204-B_140328B	162	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #1 (SS-13)
Lab ID: H14030374-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	11	mg/L		1		A2540 D	03/28/14 12:23 / SR		I24 (14410200)_140328A	32	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 22:33 / SR		MAN-TECH_140327B	79	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 22:33 / SR		MAN-TECH_140327B	79	R95860
Chloride	50	mg/L		1		E300.0	04/01/14 15:51 / abb		IC102-H_140401A	43	R95949
Sulfate	91	mg/L		1		E300.0	04/01/14 15:51 / abb		IC102-H_140401A	43	R95949
Hardness as CaCO3	181	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	14	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	0.80	mg/L		0.05		E350.1	03/31/14 10:10 / cm		FIA203-HE_140331A	49	R95894
Nitrogen, Nitrate+Nitrite as N	1.32	mg/L		0.05		E353.2	03/27/14 13:32 / cm		FIA203-HE_140327A	53	R95844
Nitrogen, Total	2.68	mg/L	D	0.06		A4500 N-C	04/01/14 14:15 / cm	04/01/14 09:18	FIA203-HE_140401B	24	24037
Phosphorus, Total as P	0.300	mg/L		0.005		E365.1	04/02/14 09:32 / cm	04/01/14 13:12	FIA202-HE_140402B	20	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Barium	0.049	mg/L		0.003		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 10:59 / sld		ICP2-HE_140327A	38	R95851
Cadmium	0.00008	mg/L		0.00003		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Calcium	55	mg/L		1		E200.7	03/27/14 10:59 / sld		ICP2-HE_140327A	38	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Copper	0.010	mg/L		0.001		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Iron	0.08	mg/L		0.02		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Magnesium	12	mg/L		1		E200.7	03/27/14 10:59 / sld		ICP2-HE_140327A	38	R95851
Manganese	0.220	mg/L		0.001		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 12:33 / sbk	03/31/14 08:00	HGCV202-H_140401A	19	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #1 (SS-13)
Lab ID: H14030374-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 10:59 / sld		ICP2-HE_140327A	38	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Sodium	30	mg/L		1		E200.7	03/27/14 10:59 / sld		ICP2-HE_140327A	38	R95851
Uranium	0.0060	mg/L		0.0002		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
Zinc	0.035	mg/L		0.008		E200.8	03/28/14 22:12 / dck		ICPMS204-B_140328B	163	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.218	mg/L		0.009		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Barium	0.043	mg/L		0.003		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Cadmium	0.00030	mg/L		0.00003		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Calcium	52	mg/L		1		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Copper	0.019	mg/L		0.001		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Iron	0.42	mg/L		0.02		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Lead	0.0021	mg/L		0.0003		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Manganese	0.247	mg/L		0.001		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Mercury	8.8E-06	mg/L		5E-06		E245.1	04/01/14 12:46 / sbk	03/31/14 08:00	HGCV202-H_140401A	22	24011
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Potassium	6	mg/L		1		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	164	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #1 (SS-13)
Lab ID: H14030374-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	31	mg/L		1		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 164	23989
Uranium	0.0065	mg/L		0.0002		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 164	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 164	23989
Zinc	0.066	mg/L		0.008		E200.8	03/28/14 22:16 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 164	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14030374-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 18:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	03/28/14 12:24 / SR		I24 (14410200)_140328A	33	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	03/27/14 22:37 / SR		MAN-TECH_140327B	80	R95860
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	03/27/14 22:37 / SR		MAN-TECH_140327B	80	R95860
Chloride	6	mg/L		1		E300.0	03/27/14 22:53 / abb		IC102-H_140327A	79	R95852
Sulfate	ND	mg/L		1		E300.0	03/27/14 22:53 / abb		IC102-H_140327A	79	R95852
Hardness as CaCO3	ND	mg/L		1		A2340 B	04/02/14 11:42 / sld		WATERCALC_140402B	2	R95963
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	03/31/14 10:12 / cm		FIA203-HE_140331A	50	R95894
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	03/27/14 13:33 / cm		FIA203-HE_140327A	54	R95844
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	03/31/14 15:29 / cm	03/31/14 09:53	FIA203-HE_140331C	37	24021
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	04/02/14 09:33 / cm	04/01/14 13:12	FIA202-HE_140402B	21	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Arsenic	ND	mg/L		0.001		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Barium	0.020	mg/L		0.003		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:03 / sld		ICP2-HE_140327A	39	R95851
Cadmium	ND	mg/L		0.00003		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Calcium	ND	mg/L		1		E200.7	03/27/14 11:03 / sld		ICP2-HE_140327A	39	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Cobalt	ND	mg/L		0.01		E200.8	04/01/14 20:17 / dck		ICPMS204-B_140401B	59	R95960
Copper	ND	mg/L		0.001		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Iron	ND	mg/L		0.02		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Lead	ND	mg/L		0.0003		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Magnesium	ND	mg/L		1		E200.7	03/27/14 11:03 / sld		ICP2-HE_140327A	39	R95851
Manganese	ND	mg/L		0.001		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 12:50 / sbk	03/31/14 08:00	HGCV202-H_140401A	23	24011

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14030374-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 18:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Potassium	ND	mg/L		1		E200.7	03/27/14 11:03 / sld		ICP2-HE_140327A	39	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Sodium	ND	mg/L		1		E200.7	03/27/14 11:03 / sld		ICP2-HE_140327A	39	R95851
Uranium	ND	mg/L		0.0002		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:33 / dck		ICPMS204-B_140328B	168	R95901
Zinc	0.009	mg/L		0.008		E200.8	04/01/14 20:17 / dck		ICPMS204-B_140401B	59	R95960
METALS, TOTAL RECOVERABLE											
Aluminum	0.016	mg/L		0.009		E200.8	04/01/14 20:21 / dck	03/27/14 07:58	ICPMS204-B_140401B	60	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Arsenic	ND	mg/L		0.001		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Barium	ND	mg/L		0.003		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Cadmium	ND	mg/L		0.00003		E200.8	04/01/14 20:21 / dck	03/27/14 07:58	ICPMS204-B_140401B	60	23989
Calcium	ND	mg/L		1		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Cobalt	ND	mg/L		0.01		E200.8	04/01/14 20:21 / dck	03/27/14 07:58	ICPMS204-B_140401B	60	23989
Copper	ND	mg/L		0.001		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Iron	ND	mg/L		0.02		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Lead	ND	mg/L		0.0003		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Magnesium	ND	mg/L		1		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Manganese	ND	mg/L		0.001		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 12:54 / sbk	03/31/14 08:00	HGCV202-H_140401A	24	24011
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Potassium	ND	mg/L		1		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14030374-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 18:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	ND	mg/L		1		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Uranium	ND	mg/L		0.0002		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989
Zinc	ND	mg/L		0.008		E200.8	03/28/14 22:38 / dck	03/27/14 07:58	ICPMS204-B_140328B	169	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14030374-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	22	mg/L		1		A2540 D	03/28/14 12:24 / SR		I24 (14410200)_140328A	34	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 22:45 / SR		MAN-TECH_140327B	81	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 22:45 / SR		MAN-TECH_140327B	81	R95860
Chloride	53	mg/L		1		E300.0	03/27/14 23:03 / abb		IC102-H_140327A	80	R95852
Sulfate	100	mg/L		1		E300.0	03/27/14 23:03 / abb		IC102-H_140327A	80	R95852
Hardness as CaCO3	184	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	15	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	0.96	mg/L		0.05		E350.1	03/31/14 10:19 / cm		FIA203-HE_140331A	56	R95894
Nitrogen, Nitrate+Nitrite as N	1.30	mg/L		0.05		E353.2	03/27/14 13:36 / cm		FIA203-HE_140327A	57	R95844
Nitrogen, Total	2.95	mg/L	D	0.06		A4500 N-C	03/31/14 15:32 / cm	03/31/14 09:53	FIA203-HE_140331C	40	24021
Phosphorus, Total as P	0.320	mg/L		0.005		E365.1	04/02/14 09:34 / cm	04/01/14 13:12	FIA202-HE_140402B	22	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Barium	0.049	mg/L		0.003		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:07 / sld		ICP2-HE_140327A	40	R95851
Cadmium	0.00013	mg/L		0.00003		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Calcium	56	mg/L		1		E200.7	03/27/14 11:07 / sld		ICP2-HE_140327A	40	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Cobalt	ND	mg/L		0.01		E200.8	04/01/14 20:26 / dck		ICPMS204-B_140401B	61	R95960
Copper	0.010	mg/L		0.001		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Iron	0.10	mg/L		0.02		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Magnesium	13	mg/L		1		E200.8	04/01/14 20:26 / dck		ICPMS204-B_140401B	61	R95960
Manganese	0.247	mg/L		0.001		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 13:07 / sbk	03/31/14 08:00	HGCV202-H_140401A	27	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14030374-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 11:07 / sld		ICP2-HE_140327A	40	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Sodium	30	mg/L		1		E200.7	03/27/14 11:07 / sld		ICP2-HE_140327A	40	R95851
Uranium	0.0064	mg/L		0.0002		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
Zinc	0.043	mg/L		0.008		E200.8	03/28/14 22:42 / dck		ICPMS204-B_140328B	170	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.376	mg/L		0.009		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Barium	0.046	mg/L		0.003		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Cadmium	0.00038	mg/L		0.00003		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Calcium	52	mg/L		1		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Copper	0.024	mg/L		0.001		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Iron	0.62	mg/L		0.02		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Lead	0.0031	mg/L		0.0003		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Manganese	0.290	mg/L		0.001		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Mercury	0.000018	mg/L		5E-06		E245.1	04/01/14 13:11 / sbk	03/31/14 08:00	HGCV202-H_140401A	28	24011
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Potassium	6	mg/L		1		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14030374-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Uranium	0.0068	mg/L		0.0002		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989
Zinc	0.088	mg/L		0.008		E200.8	03/28/14 23:00 / dck	03/27/14 07:58	ICPMS204-B_140328B	174	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14030374-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
Report Date: 04/24/14
DateReceived: 03/26/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	14	mg/L		1		A2540 D	03/28/14 12:25 / SR		I24 (14410200)_140328A	35	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	03/27/14 22:52 / SR		MAN-TECH_140327B	82	R95860
Bicarbonate as HCO3	140	mg/L		4		A2320 B	03/27/14 22:52 / SR		MAN-TECH_140327B	82	R95860
Chloride	55	mg/L		1		E300.0	03/27/14 23:13 / abb		IC102-H_140327A	81	R95852
Sulfate	99	mg/L		1		E300.0	03/27/14 23:13 / abb		IC102-H_140327A	81	R95852
Hardness as CaCO3	185	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	16	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	1.44	mg/L		0.05		E350.1	03/31/14 10:22 / cm		FIA203-HE_140331A	59	R95894
Nitrogen, Nitrate+Nitrite as N	1.31	mg/L		0.05		E353.2	03/27/14 13:40 / cm		FIA203-HE_140327A	60	R95844
Nitrogen, Total	3.57	mg/L	D	0.06		A4500 N-C	03/31/14 15:34 / cm	03/31/14 09:53	FIA203-HE_140331C	41	24021
Phosphorus, Total as P	0.312	mg/L		0.005		E365.1	04/02/14 09:35 / cm	04/01/14 13:12	FIA202-HE_140402B	23	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Barium	0.050	mg/L		0.003		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:11 / sld		ICP2-HE_140327A	41	R95851
Cadmium	0.00023	mg/L		0.00003		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Calcium	57	mg/L		1		E200.7	03/27/14 11:11 / sld		ICP2-HE_140327A	41	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Copper	0.013	mg/L		0.001		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Iron	0.09	mg/L		0.02		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Lead	0.0005	mg/L		0.0003		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Magnesium	13	mg/L		1		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Manganese	0.323	mg/L		0.001		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 13:15 / sbk	03/31/14 08:00	HGCV202-H_140401A	29	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14030374-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 11:11 / sld		ICP2-HE_140327A	41	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Sodium	31	mg/L		1		E200.7	03/27/14 11:11 / sld		ICP2-HE_140327A	41	R95851
Uranium	0.0066	mg/L		0.0002		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
Zinc	0.085	mg/L		0.008		E200.8	03/28/14 23:04 / dck		ICPMS204-B_140328B	175	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.325	mg/L		0.009		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Barium	0.048	mg/L		0.003		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Cadmium	0.00047	mg/L		0.00003		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Calcium	53	mg/L		1		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Copper	0.030	mg/L		0.001		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Iron	0.57	mg/L		0.02		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Lead	0.0043	mg/L		0.0003		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Magnesium	13	mg/L		1		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Manganese	0.376	mg/L		0.001		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Mercury	0.000018	mg/L		5E-06		E245.1	04/01/14 13:19 / sbk	03/31/14 08:00	HGCV202-H_140401A	30	24011
Molybdenum	0.006	mg/L		0.005		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Potassium	6	mg/L		1		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Silver	0.0005	mg/L	D	0.0004		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14030374-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	31	mg/L		1		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Uranium	0.0068	mg/L		0.0002		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989
Zinc	0.129	mg/L		0.008		E200.8	03/28/14 23:22 / dck	03/27/14 07:58	ICPMS204-B_140328B	179	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14030374-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	9	mg/L		1		A2540 D	03/28/14 12:25 / SR		I24 (14410200)_140328A	36	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 22:59 / SR		MAN-TECH_140327B	83	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 22:59 / SR		MAN-TECH_140327B	83	R95860
Chloride	37	mg/L		1		E300.0	04/01/14 16:21 / abb		IC102-H_140401A	46	R95949
Sulfate	76	mg/L		1		E300.0	04/01/14 16:21 / abb		IC102-H_140401A	46	R95949
Hardness as CaCO3	164	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	17	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	1.00	mg/L		0.05		E350.1	03/31/14 10:24 / cm		FIA203-HE_140331A	60	R95894
Nitrogen, Nitrate+Nitrite as N	0.94	mg/L		0.05		E353.2	03/27/14 13:41 / cm		FIA203-HE_140327A	61	R95844
Nitrogen, Total	2.55	mg/L	D	0.06		A4500 N-C	03/31/14 15:35 / cm	03/31/14 09:53	FIA203-HE_140331C	42	24021
Phosphorus, Total as P	0.218	mg/L		0.005		E365.1	04/02/14 09:36 / cm	04/01/14 13:12	FIA202-HE_140402B	24	24038
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Arsenic	0.006	mg/L		0.001		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Barium	0.043	mg/L		0.003		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:14 / sld		ICP2-HE_140327A	42	R95851
Cadmium	0.00017	mg/L		0.00003		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Calcium	50	mg/L		1		E200.7	03/27/14 11:14 / sld		ICP2-HE_140327A	42	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Copper	0.009	mg/L		0.001		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Iron	0.07	mg/L		0.02		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Lead	0.0003	mg/L		0.0003		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Magnesium	10	mg/L		1		E200.7	03/27/14 11:14 / sld		ICP2-HE_140327A	42	R95851
Manganese	0.226	mg/L		0.001		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 13:23 / sbk	03/31/14 08:00	HGCV202-H_140401A	31	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14030374-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Potassium	5	mg/L		1		E200.7	03/27/14 11:14 / sld		ICP2-HE_140327A	42	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Sodium	23	mg/L		1		E200.7	03/27/14 11:14 / sld		ICP2-HE_140327A	42	R95851
Uranium	0.0048	mg/L		0.0002		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
Zinc	0.074	mg/L		0.008		E200.8	03/28/14 23:26 / dck		ICPMS204-B_140328B	180	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.242	mg/L		0.009		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Barium	0.042	mg/L		0.003		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Cadmium	0.00032	mg/L		0.00003		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Calcium	47	mg/L		1		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Copper	0.021	mg/L		0.001		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Iron	0.40	mg/L		0.02		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Lead	0.0028	mg/L		0.0003		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Magnesium	11	mg/L		1		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Manganese	0.254	mg/L		0.001		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Mercury	9.9E-06	mg/L		5E-06		E245.1	04/01/14 13:28 / sbk	03/31/14 08:00	HGCV202-H_140401A	32	24011
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Potassium	5	mg/L		1		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	181	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14030374-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	23	mg/L		1		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 181	23989
Uranium	0.0052	mg/L		0.0002		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 181	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 181	23989
Zinc	0.100	mg/L		0.008		E200.8	03/28/14 23:30 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 181	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14030374-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	8	mg/L		1		A2540 D	03/28/14 12:26 / SR		I24 (14410200)_140328A	37	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 23:07 / SR		MAN-TECH_140327B	84	R95860
Bicarbonate as HCO3	140	mg/L		4		A2320 B	03/27/14 23:07 / SR		MAN-TECH_140327B	84	R95860
Chloride	46	mg/L		1		E300.0	03/27/14 23:33 / abb		IC102-H_140327A	83	R95852
Sulfate	90	mg/L		1		E300.0	03/27/14 23:33 / abb		IC102-H_140327A	83	R95852
Hardness as CaCO3	176	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	18	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	0.99	mg/L		0.05		E350.1	03/31/14 10:25 / cm		FIA203-HE_140331A	61	R95894
Nitrogen, Nitrate+Nitrite as N	1.30	mg/L		0.05		E353.2	03/27/14 13:42 / cm		FIA203-HE_140327A	62	R95844
Nitrogen, Total	2.94	mg/L	D	0.06		A4500 N-C	03/31/14 15:36 / cm	03/31/14 09:53	FIA203-HE_140331C	43	24021
Phosphorus, Total as P	0.221	mg/L		0.005		E365.1	03/28/14 10:39 / cm	03/28/14 08:25	FIA202-HE_140328A	43	24001
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Barium	0.046	mg/L		0.003		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:25 / sld		ICP2-HE_140327A	45	R95851
Cadmium	0.00022	mg/L		0.00003		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Calcium	53	mg/L		1		E200.7	03/27/14 11:25 / sld		ICP2-HE_140327A	45	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Copper	0.013	mg/L		0.001		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Iron	0.09	mg/L		0.02		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Magnesium	12	mg/L		1		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Manganese	0.299	mg/L		0.001		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 13:32 / sbk	03/31/14 08:00	HGCV202-H_140401A	33	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14030374-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Potassium	6	mg/L		1		E200.7	03/27/14 11:25 / sld		ICP2-HE_140327A	45	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Sodium	27	mg/L		1		E200.7	03/27/14 11:25 / sld		ICP2-HE_140327A	45	R95851
Uranium	0.0055	mg/L		0.0002		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
Zinc	0.104	mg/L		0.008		E200.8	03/28/14 23:35 / dck		ICPMS204-B_140328B	182	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.193	mg/L		0.009		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Barium	0.043	mg/L		0.003		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Boron	ND	mg/L		0.1		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Cadmium	0.00097	mg/L		0.00003		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Calcium	50	mg/L		1		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Copper	0.024	mg/L		0.001		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Iron	0.39	mg/L		0.02		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Lead	0.0032	mg/L		0.0003		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Magnesium	12	mg/L		1		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Manganese	0.323	mg/L		0.001		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Mercury	0.000017	mg/L		5E-06		E245.1	04/01/14 13:36 / sbk	03/31/14 08:00	HGCV202-H_140401A	34	24011
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Potassium	6	mg/L		1		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	183	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14030374-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	28	mg/L		1		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 183	23989
Uranium	0.0060	mg/L		0.0002		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 183	23989
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 183	23989
Zinc	0.128	mg/L		0.008		E200.8	03/28/14 23:39 / dck	03/27/14 07:58	ICPMS204-B_140328B	: 183	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14030374-017
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	03/28/14 12:26 / SR		I24 (14410200)_140328A	38	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 23:37 / SR		MAN-TECH_140327B	92	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 23:37 / SR		MAN-TECH_140327B	92	R95860
Chloride	42	mg/L		1		E300.0	04/01/14 16:51 / abb		IC102-H_140401A	49	R95949
Sulfate	96	mg/L		1		E300.0	04/01/14 16:51 / abb		IC102-H_140401A	49	R95949
Hardness as CaCO3	174	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	19	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	0.33	mg/L		0.05		E350.1	03/31/14 10:26 / cm		FIA203-HE_140331A	62	R95894
Nitrogen, Nitrate+Nitrite as N	1.28	mg/L		0.05		E353.2	03/27/14 13:44 / cm		FIA203-HE_140327A	63	R95844
Nitrogen, Total	2.21	mg/L	D	0.06		A4500 N-C	03/31/14 15:37 / cm	03/31/14 09:53	FIA203-HE_140331C	44	24021
Phosphorus, Total as P	0.188	mg/L		0.005		E365.1	03/28/14 10:42 / cm	03/28/14 08:25	FIA202-HE_140328A	46	24001
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Barium	0.044	mg/L		0.003		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:29 / sld		ICP2-HE_140327A	46	R95851
Cadmium	0.00041	mg/L		0.00003		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Calcium	53	mg/L		1		E200.7	03/27/14 11:29 / sld		ICP2-HE_140327A	46	R95851
Chromium	ND	mg/L		0.01		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Copper	0.018	mg/L		0.001		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Iron	0.08	mg/L		0.02		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Magnesium	12	mg/L		1		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Manganese	0.234	mg/L		0.001		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 13:40 / sbk	03/31/14 08:00	HGCV202-H_140401A	35	24011

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14030374-017
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Nickel	ND	mg/L		0.002		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Potassium	5	mg/L		1		E200.7	03/27/14 11:29 / sld		ICP2-HE_140327A	46	R95851
Selenium	ND	mg/L		0.001		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Silver	ND	mg/L		0.0002		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Sodium	27	mg/L		1		E200.7	03/27/14 11:29 / sld		ICP2-HE_140327A	46	R95851
Uranium	0.0056	mg/L		0.0002		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
Zinc	0.129	mg/L		0.008		E200.8	03/28/14 23:43 / dck		ICPMS204-B_140328B	184	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.246	mg/L		0.009		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Antimony	ND	mg/L		0.0005		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Barium	0.040	mg/L		0.003		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Boron	ND	mg/L		0.1		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Cadmium	0.00058	mg/L		0.00003		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Calcium	50	mg/L		1		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Chromium	ND	mg/L		0.01		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Cobalt	ND	mg/L		0.01		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Copper	0.031	mg/L		0.001		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Iron	0.46	mg/L		0.02		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Lead	0.0033	mg/L		0.0003		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Magnesium	12	mg/L		1		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Manganese	0.259	mg/L		0.001		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Mercury	0.000019	mg/L		5E-06		E245.1	04/01/14 13:53 / sbk	03/31/14 08:00	HGCV202-H_140401A	38	24011
Molybdenum	ND	mg/L		0.005		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Nickel	ND	mg/L		0.002		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Potassium	6	mg/L		1		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Selenium	ND	mg/L		0.001		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Silver	ND	mg/L		0.0002		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14030374-017
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	28	mg/L		1		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Uranium	0.0058	mg/L		0.0002		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Vanadium	ND	mg/L		0.1		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989
Zinc	0.158	mg/L		0.008		E200.8	03/29/14 00:01 / dck	03/27/14 07:58	ICPMS204-B_140328B	188	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14030374-018
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	10	mg/L		1		A2540 D	03/28/14 12:27 / SR		I24 (14410200)_140328A	40	TSS140328A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	03/27/14 23:52 / SR		MAN-TECH_140327B	95	R95860
Bicarbonate as HCO3	130	mg/L		4		A2320 B	03/27/14 23:52 / SR		MAN-TECH_140327B	95	R95860
Chloride	40	mg/L		1		E300.0	03/27/14 23:54 / abb		IC102-H_140327A	85	R95852
Sulfate	99	mg/L		1		E300.0	03/27/14 23:54 / abb		IC102-H_140327A	85	R95852
Hardness as CaCO3	173	mg/L		1		A2340 B	04/01/14 09:51 / sld		WATERCALC_140401A	20	R95918
NUTRIENTS											
Nitrogen, Ammonia as N	0.34	mg/L		0.05		E350.1	03/31/14 10:27 / cm		FIA203-HE_140331A	63	R95894
Nitrogen, Nitrate+Nitrite as N	1.21	mg/L		0.05		E353.2	03/27/14 13:45 / cm		FIA203-HE_140327A	64	R95844
Nitrogen, Total	2.04	mg/L	D	0.06		A4500 N-C	03/31/14 15:38 / cm	03/31/14 09:53	FIA203-HE_140331C	45	24021
Phosphorus, Total as P	0.186	mg/L		0.005		E365.1	03/28/14 10:43 / cm	03/28/14 08:25	FIA202-HE_140328A	47	24001
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Antimony	ND	mg/L		0.0005		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Arsenic	0.007	mg/L		0.001		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Barium	0.045	mg/L		0.003		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Beryllium	ND	mg/L		0.0008		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Boron	ND	mg/L		0.1		E200.7	03/27/14 11:33 / sld		ICP2-HE_140327A	47	R95851
Cadmium	0.00039	mg/L		0.00003		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Calcium	53	mg/L		1		E200.7	03/27/14 11:33 / sld		ICP2-HE_140327A	47	R95851
Chromium	ND	mg/L		0.01		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Cobalt	ND	mg/L		0.01		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Copper	0.016	mg/L		0.001		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Iron	0.08	mg/L		0.02		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Lead	0.0004	mg/L		0.0003		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Magnesium	12	mg/L		1		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Manganese	0.210	mg/L		0.001		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Mercury	ND	mg/L		5E-06		E245.1	04/01/14 14:14 / sbk	03/31/14 08:01	HGCV202-H_140401A	43	24012

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14030374-018
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Nickel	ND	mg/L		0.002		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Potassium	5	mg/L		1		E200.7	03/27/14 11:33 / sld		ICP2-HE_140327A	47	R95851
Selenium	ND	mg/L		0.001		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Silver	ND	mg/L		0.0002		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Sodium	28	mg/L		1		E200.7	03/27/14 11:33 / sld		ICP2-HE_140327A	47	R95851
Uranium	0.0061	mg/L		0.0002		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Vanadium	ND	mg/L		0.1		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
Zinc	0.121	mg/L		0.008		E200.8	03/29/14 00:05 / dck		ICPMS204-B_140328B	189	R95901
METALS, TOTAL RECOVERABLE											
Aluminum	0.234	mg/L		0.009		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Antimony	ND	mg/L		0.0005		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Arsenic	0.008	mg/L		0.001		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Barium	0.040	mg/L		0.003		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Beryllium	ND	mg/L		0.0008		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Boron	ND	mg/L		0.1		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Cadmium	0.00054	mg/L		0.00003		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Calcium	50	mg/L		1		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Chromium	ND	mg/L		0.01		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Cobalt	ND	mg/L		0.01		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Copper	0.028	mg/L		0.001		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Iron	0.44	mg/L		0.02		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Lead	0.0030	mg/L		0.0003		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Magnesium	12	mg/L		1		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Manganese	0.237	mg/L		0.001		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Mercury	0.000017	mg/L		5E-06		E245.1	04/01/14 14:18 / sbk	03/31/14 08:01	HGCV202-H_140401A	44	24012
Molybdenum	ND	mg/L		0.005		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Nickel	ND	mg/L		0.002		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Potassium	5	mg/L		1		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Selenium	ND	mg/L		0.001		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Silver	ND	mg/L		0.0002		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14030374-018
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	28	mg/L		1		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Uranium	0.0064	mg/L		0.0002		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Vanadium	ND	mg/L		0.1		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989
Zinc	0.145	mg/L		0.008		E200.8	03/29/14 00:10 / dck	03/27/14 07:58	ICPMS204-B_140328B	190	23989

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Lab ID: H14030374-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	11.0	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	10	R96065
PHYSICAL CHARACTERISTICS											
Moisture	62.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	11	R96228
3050 EXTRACTABLE METALS											
Aluminum	7540	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	159	24079
Arsenic	26	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Barium	94	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Boron	5	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Cadmium	2.9	mg/kg		0.2		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Chromium	17	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Copper	227	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Iron	10300	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Lead	121	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Manganese	1110	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Molybdenum	6	mg/kg		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	159	24079
Nickel	10	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	159	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	159	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	159	24079
Vanadium	31	mg/kg		1		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
Zinc	659	mg/kg		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:47	ICP2-HE_140407B	23	24079
METALS, TOTAL											
Mercury	0.30	mg/kg		0.10		SW7471B	04/09/14 12:28 / sbk	04/07/14 08:31	HGCV201-H_140409A	64	24097
METAL, DRY WEIGHT											
Aluminum	20100	mg/kg-dry		8		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Lab ID: H14030374-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	198	24079
Arsenic	68	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Barium	250	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Boron	14	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Cadmium	7.7	mg/kg-dry		0.2		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Chromium	45	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Cobalt	6	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Copper	604	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Iron	27400	mg/kg-dry		7		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Lead	322	mg/kg-dry		8		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Manganese	2950	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Molybdenum	17	mg/kg-dry		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	198	24079
Nickel	27	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	198	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	198	24079
Uranium	6	mg/kg-dry		5		SW6020	04/08/14 01:58 / dck	04/03/14 15:47	ICPMS204-B_140407B	198	24079
Vanadium	83	mg/kg-dry		2		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Zinc	1750	mg/kg-dry		5		SW6010B	04/07/14 12:03 / sld	04/03/14 15:44	ICP2-HE_140407B	89	24079
Mercury	0.79	mg/kg-dry		0.10		SW7471B	04/09/14 12:28 / sbk	04/07/14 08:31	HGCV201-H_140409A	198	24097

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Lab ID: H14030374-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	26.0	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	11	R96065
PHYSICAL CHARACTERISTICS											
Moisture	30.9	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	12	R96228
3050 EXTRACTABLE METALS											
Aluminum	3910	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Arsenic	17	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Barium	96	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Cadmium	1.3	mg/kg		0.2		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Chromium	7	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Copper	97	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Iron	9280	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Lead	57	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Manganese	993	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
Vanadium	25	mg/kg		1		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	27	24078
Zinc	430	mg/kg		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	55	24078
METALS, TOTAL											
Mercury	0.13	mg/kg		0.10		SW7471B	04/09/14 12:42 / sbk	04/07/14 15:33	HGCV201-H_140409A	70	24116
METAL, DRY WEIGHT											
Aluminum	5650	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Lab ID: H14030374-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Arsenic	25	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Barium	139	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Cadmium	1.9	mg/kg-dry		0.2		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Chromium	10	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Cobalt	5	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Copper	140	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Iron	13400	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Lead	82	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Manganese	1440	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Nickel	6	mg/kg-dry		5		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Vanadium	36	mg/kg-dry		1		SW6010B	04/08/14 14:20 / sld	04/03/14 15:44	ICP2-HE_140408C	111	24078
Zinc	622	mg/kg-dry		5		SW6020	04/10/14 21:06 / dck	04/03/14 15:44	ICPMS204-B_140411A	254	24078
Mercury	0.19	mg/kg-dry		0.10		SW7471B	04/09/14 12:42 / sbk	04/07/14 15:33	HGCV201-H_140409A	204	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14030374-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	24.3	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	12	R96065
PHYSICAL CHARACTERISTICS											
Moisture	22.0	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	14	R96228
3050 EXTRACTABLE METALS											
Aluminum	2550	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	118	24077
Arsenic	12	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Barium	82	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Cadmium	0.6	mg/kg		0.2		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	118	24077
Chromium	ND	mg/kg		5		SW6010B	04/11/14 16:53 / sld	04/09/14 14:37	ICP2-HE_140411A	54	24149
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Copper	51	mg/kg		5		SW6010B	04/16/14 18:39 / sld	04/15/14 07:32	ICP2-HE_140416D	34	24203
Iron	4340	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Lead	22	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Manganese	1460	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	118	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	118	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	118	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	118	24077
Vanadium	16	mg/kg		1		SW6010B	04/08/14 16:36 / sld	04/03/14 15:42	ICP2-HE_140408C	64	24077
Zinc	198	mg/kg		5		SW6010B	04/16/14 18:39 / sld	04/15/14 07:32	ICP2-HE_140416D	34	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:44 / sbk	04/07/14 15:33	HGCV201-H_140409A	71	24116
METAL, DRY WEIGHT											
Aluminum	3270	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14030374-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	153	24077
Arsenic	15	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Barium	104	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Boron	5	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Cadmium	0.8	mg/kg-dry		0.2		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	153	24077
Chromium	ND	mg/kg-dry		5		SW6010B	04/11/14 16:53 / sld	04/09/14 14:37	ICP2-HE_140411A	181	24149
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Copper	65	mg/kg-dry		5		SW6010B	04/16/14 18:39 / sld	04/15/14 07:32	ICP2-HE_140416D	121	24203
Iron	5570	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Lead	29	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Manganese	1870	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	153	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	153	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	153	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:07 / dck	04/03/14 15:42	ICPMS204-B_140408B	153	24077
Vanadium	20	mg/kg-dry		1		SW6010B	04/08/14 16:36 / sld	04/03/14 15:39	ICP2-HE_140408C	148	24077
Zinc	254	mg/kg-dry		5		SW6010B	04/16/14 18:39 / sld	04/15/14 07:32	ICP2-HE_140416D	121	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 12:44 / sbk	04/07/14 15:33	HGCV201-H_140409A	205	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14030374-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	23.7	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	13	R96065
PHYSICAL CHARACTERISTICS											
Moisture	61.8	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	15	R96228
3050 EXTRACTABLE METALS											
Aluminum	7080	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	160	24079
Arsenic	22	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Barium	99	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Cadmium	2.2	mg/kg		0.2		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Chromium	10	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Copper	218	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Iron	9500	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Lead	101	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Manganese	650	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	160	24079
Nickel	6	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	160	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	160	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	160	24079
Vanadium	25	mg/kg		1		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
Zinc	583	mg/kg		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:47	ICP2-HE_140407B	24	24079
METALS, TOTAL											
Mercury	0.29	mg/kg		0.10		SW7471B	04/09/14 12:54 / sbk	04/07/14 15:33	HGCV201-H_140409A	75	24116
METAL, DRY WEIGHT											
Aluminum	18500	mg/kg-dry		8		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14030374-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	199	24079
Arsenic	57	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Barium	259	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Boron	13	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Cadmium	5.7	mg/kg-dry		0.2		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Chromium	27	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Cobalt	6	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Copper	571	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Iron	24800	mg/kg-dry		7		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Lead	264	mg/kg-dry		8		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Manganese	1700	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Molybdenum	13	mg/kg-dry		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	199	24079
Nickel	16	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	199	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	199	24079
Uranium	5	mg/kg-dry		5		SW6020	04/08/14 02:02 / dck	04/03/14 15:47	ICPMS204-B_140407B	199	24079
Vanadium	66	mg/kg-dry		2		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Zinc	1530	mg/kg-dry		5		SW6010B	04/07/14 12:06 / sld	04/03/14 15:44	ICP2-HE_140407B	90	24079
Mercury	0.76	mg/kg-dry		0.10		SW7471B	04/09/14 12:54 / sbk	04/07/14 15:33	HGCV201-H_140409A	209	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14030374-023
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	29.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	14	R96065
PHYSICAL CHARACTERISTICS											
Moisture	40.5	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	16	R96228
3050 EXTRACTABLE METALS											
Aluminum	3670	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Arsenic	21	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Barium	76	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Cadmium	2.1	mg/kg		0.2		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Chromium	11	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Copper	243	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Iron	18800	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Lead	56	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Manganese	463	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Nickel	5	mg/kg		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
Vanadium	42	mg/kg		1		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	28	24078
Zinc	657	mg/kg		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	59	24078
METALS, TOTAL											
Mercury	0.34	mg/kg		0.10		SW7471B	04/09/14 12:56 / sbk	04/07/14 15:33	HGCV201-H_140409A	76	24116
METAL, DRY WEIGHT											
Aluminum	6170	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14030374-023
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Arsenic	36	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Barium	128	mg/kg-dry		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Cadmium	3.5	mg/kg-dry		0.3		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Chromium	18	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Cobalt	6	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Copper	409	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Iron	31600	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Lead	93	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Manganese	779	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Nickel	8	mg/kg-dry		5		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Vanadium	71	mg/kg-dry		1		SW6010B	04/08/14 14:23 / sld	04/03/14 15:44	ICP2-HE_140408C	112	24078
Zinc	1100	mg/kg-dry		6		SW6020	04/10/14 21:23 / dck	04/03/14 15:44	ICPMS204-B_140411A	258	24078
Mercury	0.58	mg/kg-dry		0.10		SW7471B	04/09/14 12:56 / sbk	04/07/14 15:33	HGCV201-H_140409A	210	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14030374-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	12.1	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	15	R96065
PHYSICAL CHARACTERISTICS											
Moisture	31.8	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	17	R96228
3050 EXTRACTABLE METALS											
Aluminum	2250	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	119	24077
Arsenic	15	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Barium	54	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Cadmium	0.9	mg/kg		0.2		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	119	24077
Chromium	ND	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Copper	69	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Iron	6190	mg/kg		5		SW6010B	04/16/14 18:43 / sld	04/15/14 07:32	ICP2-HE_140416D	35	24203
Lead	33	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Manganese	588	mg/kg		5		SW6010B	04/11/14 16:56 / sld	04/09/14 14:37	ICP2-HE_140411A	55	24149
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	119	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:42	ICP2-HE_140408C	65	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	119	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	119	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	119	24077
Vanadium	16	mg/kg		1		SW6010B	04/16/14 18:43 / sld	04/15/14 07:32	ICP2-HE_140416D	35	24203
Zinc	292	mg/kg		5		SW6010B	04/16/14 18:43 / sld	04/15/14 07:32	ICP2-HE_140416D	35	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 12:59 / sbk	04/07/14 15:33	HGCV201-H_140409A	77	24116
METAL, DRY WEIGHT											
Aluminum	3290	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14030374-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 15:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	154	24077
Arsenic	21	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Barium	80	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Cadmium	1.3	mg/kg-dry		0.2		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	154	24077
Chromium	7	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Copper	101	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Iron	9070	mg/kg-dry		5		SW6010B	04/16/14 18:43 / sld	04/15/14 07:32	ICP2-HE_140416D	122	24203
Lead	49	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Manganese	861	mg/kg-dry		5		SW6010B	04/11/14 16:56 / sld	04/09/14 14:37	ICP2-HE_140411A	182	24149
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	154	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:39 / sld	04/03/14 15:39	ICP2-HE_140408C	149	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	154	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	154	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:12 / dck	04/03/14 15:42	ICPMS204-B_140408B	154	24077
Vanadium	23	mg/kg-dry		1		SW6010B	04/16/14 18:43 / sld	04/15/14 07:32	ICP2-HE_140416D	122	24203
Zinc	428	mg/kg-dry		5		SW6010B	04/16/14 18:43 / sld	04/15/14 07:32	ICP2-HE_140416D	122	24203
Mercury	0.12	mg/kg-dry		0.10		SW7471B	04/09/14 12:59 / sbk	04/07/14 15:33	HGCV201-H_140409A	211	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Lab ID: H14030374-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.4	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	16	R96065
PHYSICAL CHARACTERISTICS											
Moisture	72.3	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	18	R96228
3050 EXTRACTABLE METALS											
Aluminum	5750	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	161	24079
Arsenic	18	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Barium	100	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Cadmium	3.3	mg/kg		0.2		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Chromium	26	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Copper	245	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Iron	8520	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Lead	156	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Manganese	407	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	161	24079
Nickel	14	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	161	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	161	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	161	24079
Vanadium	16	mg/kg		1		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
Zinc	547	mg/kg		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:47	ICP2-HE_140407B	27	24079
METALS, TOTAL											
Mercury	0.65	mg/kg		0.10		SW7471B	04/09/14 15:11 / sbk	04/07/14 15:33	HGCV201-H_140409A	130	24116
METAL, DRY WEIGHT											
Aluminum	20700	mg/kg-dry		10		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Lab ID: H14030374-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	200	24079
Arsenic	64	mg/kg-dry		6		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Barium	359	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Boron	16	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Cadmium	11.7	mg/kg-dry		0.2		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Chromium	93	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Copper	884	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Iron	30700	mg/kg-dry		10		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Lead	561	mg/kg-dry		10		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Manganese	1470	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Molybdenum	14	mg/kg-dry		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	200	24079
Nickel	50	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	200	24079
Silver	6	mg/kg-dry		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	200	24079
Uranium	8	mg/kg-dry		5		SW6020	04/08/14 02:07 / dck	04/03/14 15:47	ICPMS204-B_140407B	200	24079
Vanadium	58	mg/kg-dry		2		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Zinc	1970	mg/kg-dry		5		SW6010B	04/07/14 12:17 / sld	04/03/14 15:44	ICP2-HE_140407B	93	24079
Mercury	2.3	mg/kg-dry		0.36		SW7471B	04/09/14 15:11 / sbk	04/07/14 15:33	HGCV201-H_140409A	264	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14030374-026
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	10.6	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	17	R96065
PHYSICAL CHARACTERISTICS											
Moisture	20.0	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	19	R96228
3050 EXTRACTABLE METALS											
Aluminum	3250	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Arsenic	13	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Barium	64	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Cadmium	2.0	mg/kg		0.2		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Chromium	5	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Copper	104	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Iron	7420	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Lead	104	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Manganese	282	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
Vanadium	18	mg/kg		1		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	29	24078
Zinc	384	mg/kg		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	60	24078
METALS, TOTAL											
Mercury	0.35	mg/kg		0.10		SW7471B	04/09/14 13:04 / sbk	04/07/14 15:33	HGCV201-H_140409A	79	24116
METAL, DRY WEIGHT											
Aluminum	4070	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14030374-026
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Arsenic	16	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Barium	79	mg/kg-dry		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Cadmium	2.5	mg/kg-dry		0.2		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Chromium	7	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Copper	131	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Iron	9280	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Lead	130	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Manganese	353	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:28 / dck	04/03/14 15:44	ICPMS204-B_140411A	259	24078
Vanadium	22	mg/kg-dry		1		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Zinc	411	mg/kg-dry		5		SW6010B	04/08/14 14:27 / sld	04/03/14 15:44	ICP2-HE_140408C	113	24078
Mercury	0.44	mg/kg-dry		0.10		SW7471B	04/09/14 13:04 / sbk	04/07/14 15:33	HGCV201-H_140409A	213	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14030374-027
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	71.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	18	R96065
PHYSICAL CHARACTERISTICS											
Moisture	17.6	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	20	R96228
3050 EXTRACTABLE METALS											
Aluminum	3410	mg/kg		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	36	24203
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Arsenic	8	mg/kg		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Barium	42	mg/kg		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	36	24203
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:42	ICP2-HE_140408C	68	24077
Boron	ND	mg/kg		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	36	24203
Cadmium	1.1	mg/kg		0.2		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Chromium	ND	mg/kg		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:42	ICP2-HE_140408C	68	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:42	ICP2-HE_140408C	68	24077
Copper	103	mg/kg		5		SW6010B	04/11/14 17:00 / sld	04/09/14 14:37	ICP2-HE_140411A	56	24149
Iron	6250	mg/kg		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	36	24203
Lead	35	mg/kg		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	36	24203
Manganese	158	mg/kg		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:42	ICP2-HE_140408C	68	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:42	ICP2-HE_140408C	68	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	120	24077
Vanadium	13	mg/kg		1		SW6010B	04/08/14 16:50 / sld	04/03/14 15:42	ICP2-HE_140408C	68	24077
Zinc	174	mg/kg		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	36	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 13:07 / sbk	04/07/14 15:33	HGCV201-H_140409A	80	24116
METAL, DRY WEIGHT											
Aluminum	4140	mg/kg-dry		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	123	24203

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14030374-027
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 13:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Arsenic	9	mg/kg-dry		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Barium	52	mg/kg-dry		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	123	24203
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:39	ICP2-HE_140408C	152	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	123	24203
Cadmium	1.4	mg/kg-dry		0.2		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Chromium	6	mg/kg-dry		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:39	ICP2-HE_140408C	152	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:39	ICP2-HE_140408C	152	24077
Copper	125	mg/kg-dry		5		SW6010B	04/11/14 17:00 / sld	04/09/14 14:37	ICP2-HE_140411A	183	24149
Iron	7590	mg/kg-dry		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	123	24203
Lead	43	mg/kg-dry		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	123	24203
Manganese	191	mg/kg-dry		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:39	ICP2-HE_140408C	152	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:50 / sld	04/03/14 15:39	ICP2-HE_140408C	152	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:16 / dck	04/03/14 15:42	ICPMS204-B_140408B	155	24077
Vanadium	16	mg/kg-dry		1		SW6010B	04/08/14 16:50 / sld	04/03/14 15:39	ICP2-HE_140408C	152	24077
Zinc	211	mg/kg-dry		5		SW6010B	04/16/14 18:46 / sld	04/15/14 07:32	ICP2-HE_140416D	123	24203
Mercury	0.12	mg/kg-dry		0.10		SW7471B	04/09/14 13:07 / sbk	04/07/14 15:33	HGCV201-H_140409A	214	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Lab ID: H14030374-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	24.4	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	19	R96065
PHYSICAL CHARACTERISTICS											
Moisture	79.0	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	21	R96228
3050 EXTRACTABLE METALS											
Aluminum	8960	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Arsenic	8	mg/kg		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Barium	56	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Cadmium	1.5	mg/kg		0.2		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Chromium	8	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Copper	89	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Iron	7070	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Lead	50	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Manganese	510	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Nickel	5	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	162	24079
Vanadium	10	mg/kg		1		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
Zinc	267	mg/kg		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:47	ICP2-HE_140407B	28	24079
METALS, TOTAL											
Mercury	0.19	mg/kg		0.10		SW7471B	04/09/14 13:09 / sbk	04/07/14 15:33	HGCV201-H_140409A	81	24116
METAL, DRY WEIGHT											
Aluminum	41900	mg/kg-dry		20		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Lab ID: H14030374-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Arsenic	38	mg/kg-dry		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Barium	264	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Boron	13	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Cadmium	7.4	mg/kg-dry		0.7		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Chromium	38	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Copper	417	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Iron	33100	mg/kg-dry		10		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Lead	232	mg/kg-dry		10		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Manganese	2380	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Molybdenum	6	mg/kg-dry		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Nickel	24	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Uranium	7	mg/kg-dry		5		SW6020	04/08/14 02:11 / dck	04/03/14 15:47	ICPMS204-B_140407B	201	24079
Vanadium	47	mg/kg-dry		3		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Zinc	1250	mg/kg-dry		5		SW6010B	04/07/14 12:21 / sld	04/03/14 15:44	ICP2-HE_140407B	94	24079
Mercury	0.92	mg/kg-dry		0.10		SW7471B	04/09/14 13:09 / sbk	04/07/14 15:33	HGCV201-H_140409A	215	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Lab ID: H14030374-029
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30 **DateReceived:** 03/26/14
Report Date: 04/24/14 **Revised Date:** 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	32.4	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	20	R96065
PHYSICAL CHARACTERISTICS											
Moisture	39.2	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	22	R96228
3050 EXTRACTABLE METALS											
Aluminum	9650	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Arsenic	8	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Barium	127	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Cadmium	1.8	mg/kg		0.2		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Chromium	6	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Copper	88	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Iron	10700	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Lead	84	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Manganese	914	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
Vanadium	21	mg/kg		1		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	30	24078
Zinc	302	mg/kg		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	61	24078
METALS, TOTAL											
Mercury	0.36	mg/kg		0.10		SW7471B	04/09/14 13:12 / sbk	04/07/14 15:33	HGCV201-H_140409A	82	24116
METAL, DRY WEIGHT											
Aluminum	15900	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Lab ID: H14030374-029
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Arsenic	13	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Barium	209	mg/kg-dry		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Cadmium	3.0	mg/kg-dry		0.3		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Chromium	10	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Copper	145	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Iron	17500	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Lead	138	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Manganese	1500	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Vanadium	35	mg/kg-dry		1		SW6010B	04/08/14 14:31 / sld	04/03/14 15:44	ICP2-HE_140408C	114	24078
Zinc	496	mg/kg-dry		6		SW6020	04/10/14 21:32 / dck	04/03/14 15:44	ICPMS204-B_140411A	260	24078
Mercury	0.60	mg/kg-dry		0.10		SW7471B	04/09/14 13:12 / sbk	04/07/14 15:33	HGCV201-H_140409A	216	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14030374-030
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	29.4	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	21	R96065
PHYSICAL CHARACTERISTICS											
Moisture	39.8	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	23	R96228
3050 EXTRACTABLE METALS											
Aluminum	15400	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	121	24077
Arsenic	11	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Barium	147	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Cadmium	1.5	mg/kg		0.2		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	121	24077
Chromium	6	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Copper	78	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Iron	11300	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Lead	54	mg/kg		5		SW6010B	04/11/14 17:11 / sld	04/09/14 14:37	ICP2-HE_140411A	59	24149
Manganese	877	mg/kg		5		SW6010B	04/11/14 17:11 / sld	04/09/14 14:37	ICP2-HE_140411A	59	24149
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	121	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	121	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	121	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	121	24077
Vanadium	15	mg/kg		1		SW6010B	04/08/14 16:54 / sld	04/03/14 15:42	ICP2-HE_140408C	69	24077
Zinc	210	mg/kg		5		SW6010B	04/16/14 18:50 / sld	04/15/14 07:32	ICP2-HE_140416D	37	24203
METALS, TOTAL											
Mercury	0.38	mg/kg		0.10		SW7471B	04/09/14 13:19 / sbk	04/07/14 15:33	HGCV201-H_140409A	85	24116
METAL, DRY WEIGHT											
Aluminum	25600	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14030374-030
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	156	24077
Arsenic	18	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Barium	244	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Cadmium	2.4	mg/kg-dry		0.2		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	156	24077
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Cobalt	5	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Copper	129	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Iron	18800	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Lead	89	mg/kg-dry		5		SW6010B	04/11/14 17:11 / sld	04/09/14 14:37	ICP2-HE_140411A	186	24149
Manganese	1460	mg/kg-dry		5		SW6010B	04/11/14 17:11 / sld	04/09/14 14:37	ICP2-HE_140411A	186	24149
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	156	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	156	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	156	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:21 / dck	04/03/14 15:42	ICPMS204-B_140408B	156	24077
Vanadium	25	mg/kg-dry		1		SW6010B	04/08/14 16:54 / sld	04/03/14 15:39	ICP2-HE_140408C	153	24077
Zinc	349	mg/kg-dry		5		SW6010B	04/16/14 18:50 / sld	04/15/14 07:32	ICP2-HE_140416D	124	24203
Mercury	0.64	mg/kg-dry		0.10		SW7471B	04/09/14 13:19 / sbk	04/07/14 15:33	HGCV201-H_140409A	219	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve <0.065mm
Lab ID: H14030374-031
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	35.0	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	22	R96065
PHYSICAL CHARACTERISTICS											
Moisture	68.1	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	25	R96228
3050 EXTRACTABLE METALS											
Aluminum	9240	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Arsenic	6	mg/kg		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Barium	47	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Cadmium	1.3	mg/kg		0.2		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Chromium	5	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Copper	78	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Iron	6740	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Lead	43	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Manganese	462	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Nickel	ND	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	166	24079
Vanadium	9	mg/kg		1		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
Zinc	232	mg/kg		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:47	ICP2-HE_140407B	29	24079
METALS, TOTAL											
Mercury	0.18	mg/kg		0.10		SW7471B	04/09/14 13:21 / sbk	04/07/14 15:33	HGCV201-H_140409A	86	24116
METAL, DRY WEIGHT											
Aluminum	28900	mg/kg-dry		10		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve <0.065mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-031
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Arsenic	20	mg/kg-dry		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Barium	146	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Boron	8	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Cadmium	4.0	mg/kg-dry		0.5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Chromium	17	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Copper	245	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Iron	21100	mg/kg-dry		8		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Lead	135	mg/kg-dry		9		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Manganese	1450	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Nickel	10	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 02:29 / dck	04/03/14 15:47	ICPMS204-B_140407B	205	24079
Vanadium	28	mg/kg-dry		2		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Zinc	725	mg/kg-dry		5		SW6010B	04/07/14 12:25 / sld	04/03/14 15:44	ICP2-HE_140407B	95	24079
Mercury	0.57	mg/kg-dry		0.10		SW7471B	04/09/14 13:21 / sbk	04/07/14 15:33	HGCV201-H_140409A	220	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 0.065-1mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-032
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	44.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	23	R96065
PHYSICAL CHARACTERISTICS											
Moisture	46.6	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	26	R96228
3050 EXTRACTABLE METALS											
Aluminum	11500	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Arsenic	9	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Barium	142	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Cadmium	1.8	mg/kg		0.2		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Chromium	ND	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Copper	81	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Iron	10300	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Lead	76	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Manganese	931	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
Vanadium	17	mg/kg		1		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	31	24078
Zinc	359	mg/kg		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	62	24078
METALS, TOTAL											
Mercury	0.26	mg/kg		0.10		SW7471B	04/09/14 13:24 / sbk	04/07/14 15:33	HGCV201-H_140409A	87	24116
METAL, DRY WEIGHT											
Aluminum	21600	mg/kg-dry		6		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 0.065-1mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-032
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Arsenic	16	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Barium	266	mg/kg-dry		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Cadmium	3.4	mg/kg-dry		0.3		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Copper	152	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Iron	19400	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Lead	143	mg/kg-dry		6		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Manganese	1740	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Nickel	5	mg/kg-dry		5		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Vanadium	32	mg/kg-dry		1		SW6010B	04/08/14 14:34 / sld	04/03/14 15:44	ICP2-HE_140408C	115	24078
Zinc	671	mg/kg-dry		6		SW6020	04/10/14 21:37 / dck	04/03/14 15:44	ICPMS204-B_140411A	261	24078
Mercury	0.49	mg/kg-dry		0.10		SW7471B	04/09/14 13:24 / sbk	04/07/14 15:33	HGCV201-H_140409A	221	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 1-2mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-033
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	12.3	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	24	R96065
PHYSICAL CHARACTERISTICS											
Moisture	40.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	27	R96228
3050 EXTRACTABLE METALS											
Aluminum	14800	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Arsenic	8	mg/kg		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Barium	132	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Cadmium	1.0	mg/kg		0.2		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Chromium	5	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Copper	52	mg/kg		5		SW6010B	04/16/14 18:54 / sld	04/15/14 07:32	ICP2-HE_140416D	38	24203
Iron	10900	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Lead	60	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Manganese	1020	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	125	24077
Vanadium	14	mg/kg		1		SW6010B	04/08/14 16:58 / sld	04/03/14 15:42	ICP2-HE_140408C	70	24077
Zinc	197	mg/kg		5		SW6010B	04/16/14 18:54 / sld	04/15/14 07:32	ICP2-HE_140416D	38	24203
METALS, TOTAL											
Mercury	0.37	mg/kg		0.10		SW7471B	04/09/14 13:33 / sbk	04/07/14 15:33	HGCV201-H_140409A	91	24116
METAL, DRY WEIGHT											
Aluminum	24800	mg/kg-dry		6		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 1-2mm
Lab ID: H14030374-033
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Arsenic	14	mg/kg-dry		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Barium	221	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Cadmium	1.6	mg/kg-dry		0.3		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Cobalt	5	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Copper	87	mg/kg-dry		5		SW6010B	04/16/14 18:54 / sld	04/15/14 07:32	ICP2-HE_140416D	125	24203
Iron	18200	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Lead	100	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Manganese	1710	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:39 / dck	04/03/14 15:42	ICPMS204-B_140408B	157	24077
Vanadium	23	mg/kg-dry		1		SW6010B	04/08/14 16:58 / sld	04/03/14 15:39	ICP2-HE_140408C	154	24077
Zinc	331	mg/kg-dry		5		SW6010B	04/16/14 18:54 / sld	04/15/14 07:32	ICP2-HE_140416D	125	24203
Mercury	0.63	mg/kg-dry		0.10		SW7471B	04/09/14 13:33 / sbk	04/07/14 15:33	HGCV201-H_140409A	225	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve <0.065mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-034
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	18.1	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	25	R96065
PHYSICAL CHARACTERISTICS											
Moisture	67.5	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	28	R96228
3050 EXTRACTABLE METALS											
Aluminum	12500	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Arsenic	8	mg/kg		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Barium	83	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Cadmium	2.0	mg/kg		0.2		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Chromium	10	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Copper	85	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Iron	9600	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Lead	58	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Manganese	627	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Nickel	6	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	171	24079
Vanadium	15	mg/kg		1		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
Zinc	258	mg/kg		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:47	ICP2-HE_140407B	34	24079
METALS, TOTAL											
Mercury	0.21	mg/kg		0.10		SW7471B	04/09/14 13:36 / sbk	04/07/14 15:33	HGCV201-H_140409A	92	24116
METAL, DRY WEIGHT											
Aluminum	38400	mg/kg-dry		10		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve <0.065mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-034
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Arsenic	26	mg/kg-dry		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Barium	255	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Boron	14	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Cadmium	6.1	mg/kg-dry		0.5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Chromium	31	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Copper	262	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Iron	29500	mg/kg-dry		9		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Lead	177	mg/kg-dry		10		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Manganese	1930	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Nickel	18	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 02:51 / dck	04/03/14 15:47	ICPMS204-B_140407B	210	24079
Vanadium	45	mg/kg-dry		2		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Zinc	795	mg/kg-dry		5		SW6010B	04/07/14 12:43 / sld	04/03/14 15:44	ICP2-HE_140407B	100	24079
Mercury	0.66	mg/kg-dry		0.10		SW7471B	04/09/14 13:36 / sbk	04/07/14 15:33	HGCV201-H_140409A	226	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 0.065-1mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-035
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	30.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	26	R96065
PHYSICAL CHARACTERISTICS											
Moisture	37.7	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	29	R96228
3050 EXTRACTABLE METALS											
Aluminum	8220	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Arsenic	9	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Barium	117	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Cadmium	1.5	mg/kg		0.2		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Chromium	8	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Copper	77	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Iron	12200	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Lead	626	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Manganese	788	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
Vanadium	28	mg/kg		1		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	32	24078
Zinc	272	mg/kg		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	63	24078
METALS, TOTAL											
Mercury	0.33	mg/kg		0.10		SW7471B	04/09/14 13:38 / sbk	04/07/14 15:33	HGCV201-H_140409A	93	24116
METAL, DRY WEIGHT											
Aluminum	13200	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 0.065-1mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-035
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Arsenic	14	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Barium	187	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Cadmium	2.4	mg/kg-dry		0.2		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Chromium	13	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Copper	124	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Iron	19600	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Lead	1010	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Manganese	1270	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Vanadium	46	mg/kg-dry		1		SW6010B	04/08/14 14:38 / sld	04/03/14 15:44	ICP2-HE_140408C	116	24078
Zinc	437	mg/kg-dry		5		SW6020	04/10/14 21:41 / dck	04/03/14 15:44	ICPMS204-B_140411A	262	24078
Mercury	0.52	mg/kg-dry		0.10		SW7471B	04/09/14 13:38 / sbk	04/07/14 15:33	HGCV201-H_140409A	227	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 1-2mm
Lab ID: H14030374-036
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	31.4	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	27	R96065
PHYSICAL CHARACTERISTICS											
Moisture	35.3	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	30	R96228
3050 EXTRACTABLE METALS											
Aluminum	14700	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Arsenic	9	mg/kg		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Barium	132	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Cadmium	1.9	mg/kg		0.2		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Chromium	6	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Copper	66	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Iron	11300	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Lead	61	mg/kg		5		SW6010B	04/11/14 17:18 / sld	04/09/14 14:37	ICP2-HE_140411A	61	24149
Manganese	1210	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	126	24077
Vanadium	18	mg/kg		1		SW6010B	04/08/14 17:01 / sld	04/03/14 15:42	ICP2-HE_140408C	71	24077
Zinc	192	mg/kg		5		SW6010B	04/16/14 18:57 / sld	04/15/14 07:32	ICP2-HE_140416D	39	24203
METALS, TOTAL											
Mercury	0.40	mg/kg		0.10		SW7471B	04/09/14 13:40 / sbk	04/07/14 15:33	HGCV201-H_140409A	94	24116
METAL, DRY WEIGHT											
Aluminum	22700	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 1-2mm
Collection Date: 03/25/14 11:30
DateReceived: 03/26/14
Lab ID: H14030374-036
Report Date: 04/24/14
Revised Date: 05/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Arsenic	14	mg/kg-dry		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Barium	205	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Cadmium	2.9	mg/kg-dry		0.2		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Cobalt	5	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Copper	102	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Iron	17500	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Lead	94	mg/kg-dry		5		SW6010B	04/11/14 17:18 / sld	04/09/14 14:37	ICP2-HE_140411A	188	24149
Manganese	1870	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:43 / dck	04/03/14 15:42	ICPMS204-B_140408B	158	24077
Vanadium	28	mg/kg-dry		1		SW6010B	04/08/14 17:01 / sld	04/03/14 15:39	ICP2-HE_140408C	155	24077
Zinc	297	mg/kg-dry		5		SW6010B	04/16/14 18:57 / sld	04/15/14 07:32	ICP2-HE_140416D	126	24203
Mercury	0.62	mg/kg-dry		0.10		SW7471B	04/09/14 13:40 / sbk	04/07/14 15:33	HGCV201-H_140409A	228	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Lab ID: H14030374-037
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	12.2	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	28	R96065
PHYSICAL CHARACTERISTICS											
Moisture	66.7	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	31	R96228
3050 EXTRACTABLE METALS											
Aluminum	11800	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Arsenic	7	mg/kg		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Barium	43	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Cadmium	1.2	mg/kg		0.2		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Chromium	6	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Copper	59	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Iron	8420	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Lead	30	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Manganese	326	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Nickel	ND	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	172	24079
Vanadium	11	mg/kg		1		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
Zinc	209	mg/kg		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:47	ICP2-HE_140407B	35	24079
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 13:43 / sbk	04/07/14 15:33	HGCV201-H_140409A	95	24116
METAL, DRY WEIGHT											
Aluminum	35300	mg/kg-dry		10		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Lab ID: H14030374-037
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Arsenic	21	mg/kg-dry		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Barium	129	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Boron	10	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Cadmium	3.5	mg/kg-dry		0.5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Chromium	18	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Copper	176	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Iron	25300	mg/kg-dry		9		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Lead	90	mg/kg-dry		9		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Manganese	978	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Nickel	11	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 02:56 / dck	04/03/14 15:47	ICPMS204-B_140407B	211	24079
Vanadium	34	mg/kg-dry		2		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Zinc	627	mg/kg-dry		5		SW6010B	04/07/14 12:46 / sld	04/03/14 15:44	ICP2-HE_140407B	101	24079
Mercury	0.29	mg/kg-dry		0.10		SW7471B	04/09/14 13:43 / sbk	04/07/14 15:33	HGCV201-H_140409A	229	24116

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Lab ID: H14030374-038
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	23.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	29	R96065
PHYSICAL CHARACTERISTICS											
Moisture	24.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	32	R96228
3050 EXTRACTABLE METALS											
Aluminum	4630	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Arsenic	ND	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Barium	64	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Cadmium	0.9	mg/kg		0.2		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Chromium	12	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Copper	28	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Iron	18800	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Lead	14	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Manganese	487	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
Vanadium	57	mg/kg		1		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	33	24078
Zinc	107	mg/kg		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	64	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 13:57 / sbk	04/07/14 15:34	HGCV201-H_140409A	101	24117
METAL, DRY WEIGHT											
Aluminum	6120	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Lab ID: H14030374-038
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Arsenic	5	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Barium	84	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Cadmium	1.2	mg/kg-dry		0.2		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Chromium	15	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Copper	37	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Iron	24900	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Lead	19	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Manganese	644	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Vanadium	75	mg/kg-dry		1		SW6010B	04/08/14 14:41 / sld	04/03/14 15:44	ICP2-HE_140408C	117	24078
Zinc	142	mg/kg-dry		5		SW6020	04/10/14 21:45 / dck	04/03/14 15:44	ICPMS204-B_140411A	263	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 13:57 / sbk	04/07/14 15:34	HGCV201-H_140409A	235	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14030374-039
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30 **DateReceived:** 03/26/14
Report Date: 04/24/14 **Revised Date:** 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	32.3	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	30	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.1	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	33	R96228
3050 EXTRACTABLE METALS											
Aluminum	5280	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Arsenic	ND	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Barium	50	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Cadmium	0.6	mg/kg		0.2		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Chromium	ND	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Copper	19	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Iron	6750	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Lead	10	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Manganese	235	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	127	24077
Vanadium	12	mg/kg		1		SW6010B	04/08/14 17:05 / sld	04/03/14 15:42	ICP2-HE_140408C	72	24077
Zinc	69	mg/kg		5		SW6010B	04/16/14 19:01 / sld	04/15/14 07:32	ICP2-HE_140416D	40	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:00 / sbk	04/07/14 15:34	HGCV201-H_140409A	102	24117
METAL, DRY WEIGHT											
Aluminum	6700	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14030374-039
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Arsenic	ND	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Barium	63	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Cadmium	0.7	mg/kg-dry		0.2		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Chromium	5	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Copper	25	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Iron	8550	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Lead	12	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Manganese	298	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:47 / dck	04/03/14 15:42	ICPMS204-B_140408B	159	24077
Vanadium	15	mg/kg-dry		1		SW6010B	04/08/14 17:05 / sld	04/03/14 15:39	ICP2-HE_140408C	156	24077
Zinc	88	mg/kg-dry		5		SW6010B	04/16/14 19:01 / sld	04/15/14 07:32	ICP2-HE_140416D	127	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:00 / sbk	04/07/14 15:34	HGCV201-H_140409A	236	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Lab ID: H14030374-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.4	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	31	R96065
PHYSICAL CHARACTERISTICS											
Moisture	58.3	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	34	R96228
3050 EXTRACTABLE METALS											
Aluminum	8320	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	173	24079
Arsenic	11	mg/kg		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	173	24079
Barium	95	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Cadmium	2.9	mg/kg		0.2		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Chromium	9	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Copper	178	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Iron	8460	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Lead	65	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Manganese	592	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	173	24079
Nickel	5	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	173	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	173	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	173	24079
Vanadium	18	mg/kg		1		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
Zinc	550	mg/kg		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:47	ICP2-HE_140407B	36	24079
METALS, TOTAL											
Mercury	0.25	mg/kg		0.10		SW7471B	04/09/14 14:02 / sbk	04/07/14 15:34	HGCV201-H_140409A	103	24117
METAL, DRY WEIGHT											
Aluminum	20000	mg/kg-dry		7		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Lab ID: H14030374-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	212	24079
Arsenic	27	mg/kg-dry		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	212	24079
Barium	227	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Boron	12	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Cadmium	7.1	mg/kg-dry		0.2		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Chromium	21	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Copper	426	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Iron	20300	mg/kg-dry		7		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Lead	157	mg/kg-dry		7		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Manganese	1420	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	212	24079
Nickel	12	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	212	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	212	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 03:00 / dck	04/03/14 15:47	ICPMS204-B_140407B	212	24079
Vanadium	42	mg/kg-dry		2		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Zinc	1320	mg/kg-dry		5		SW6010B	04/07/14 12:50 / sld	04/03/14 15:44	ICP2-HE_140407B	102	24079
Mercury	0.61	mg/kg-dry		0.10		SW7471B	04/09/14 14:02 / sbk	04/07/14 15:34	HGCV201-H_140409A	237	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Lab ID: H14030374-041
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30 **DateReceived:** 03/26/14
Report Date: 04/24/14 **Revised Date:** 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	29.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	32	R96065
PHYSICAL CHARACTERISTICS											
Moisture	20.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	35	R96228
3050 EXTRACTABLE METALS											
Aluminum	3980	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Arsenic	5	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Barium	84	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Cadmium	1.1	mg/kg		0.2		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Chromium	7	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Copper	41	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Iron	9030	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Lead	17	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Manganese	288	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
Vanadium	24	mg/kg		1		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	34	24078
Zinc	149	mg/kg		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	65	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:05 / sbk	04/07/14 15:34	HGCV201-H_140409A	104	24117
METAL, DRY WEIGHT											
Aluminum	5000	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Lab ID: H14030374-041
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Arsenic	6	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Barium	106	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Cadmium	1.3	mg/kg-dry		0.2		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Copper	52	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Iron	11300	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Lead	21	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Manganese	362	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Vanadium	30	mg/kg-dry		1		SW6010B	04/08/14 14:45 / sld	04/03/14 15:44	ICP2-HE_140408C	118	24078
Zinc	188	mg/kg-dry		5		SW6020	04/10/14 21:50 / dck	04/03/14 15:44	ICPMS204-B_140411A	264	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:05 / sbk	04/07/14 15:34	HGCV201-H_140409A	238	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14030374-042
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	32.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	33	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.5	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	37	R96228
3050 EXTRACTABLE METALS											
Aluminum	3900	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Arsenic	ND	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Barium	91	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Cadmium	0.5	mg/kg		0.2		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Chromium	8	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Copper	31	mg/kg		5		SW6010B	04/16/14 19:05 / sld	04/15/14 07:32	ICP2-HE_140416D	41	24203
Iron	5230	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Lead	8	mg/kg		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Manganese	322	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	128	24077
Vanadium	11	mg/kg		1		SW6010B	04/08/14 17:09 / sld	04/03/14 15:42	ICP2-HE_140408C	73	24077
Zinc	69	mg/kg		5		SW6010B	04/16/14 19:05 / sld	04/15/14 07:32	ICP2-HE_140416D	41	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:07 / sbk	04/07/14 15:34	HGCV201-H_140409A	105	24117
METAL, DRY WEIGHT											
Aluminum	4970	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14030374-042
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 10:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Arsenic	ND	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Barium	116	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Cadmium	0.6	mg/kg-dry		0.2		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Chromium	10	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Copper	40	mg/kg-dry		5		SW6010B	04/16/14 19:05 / sld	04/15/14 07:32	ICP2-HE_140416D	128	24203
Iron	6660	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Lead	10	mg/kg-dry		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Manganese	409	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:52 / dck	04/03/14 15:42	ICPMS204-B_140408B	160	24077
Vanadium	14	mg/kg-dry		1		SW6010B	04/08/14 17:09 / sld	04/03/14 15:39	ICP2-HE_140408C	157	24077
Zinc	88	mg/kg-dry		5		SW6010B	04/16/14 19:05 / sld	04/15/14 07:32	ICP2-HE_140416D	128	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:07 / sbk	04/07/14 15:34	HGCV201-H_140409A	239	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Lab ID: H14030374-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.4	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	34	R96065
PHYSICAL CHARACTERISTICS											
Moisture	67.2	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	38	R96228
3050 EXTRACTABLE METALS											
Aluminum	7920	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	174	24079
Arsenic	10	mg/kg		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	174	24079
Barium	106	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Cadmium	1.9	mg/kg		0.2		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Chromium	9	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Copper	108	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Iron	7200	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Lead	45	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Manganese	757	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	174	24079
Nickel	5	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	174	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	174	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	174	24079
Vanadium	16	mg/kg		1		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
Zinc	317	mg/kg		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:47	ICP2-HE_140407B	41	24079
METALS, TOTAL											
Mercury	0.20	mg/kg		0.10		SW7471B	04/09/14 14:09 / sbk	04/07/14 15:34	HGCV201-H_140409A	106	24117
METAL, DRY WEIGHT											
Aluminum	24100	mg/kg-dry		9		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Lab ID: H14030374-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	213	24079
Arsenic	30	mg/kg-dry		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	213	24079
Barium	322	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Boron	13	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Cadmium	5.7	mg/kg-dry		0.2		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Chromium	28	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Copper	331	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Iron	22000	mg/kg-dry		8		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Lead	137	mg/kg-dry		9		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Manganese	2310	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	213	24079
Nickel	16	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	213	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	213	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 03:05 / dck	04/03/14 15:47	ICPMS204-B_140407B	213	24079
Vanadium	49	mg/kg-dry		2		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Zinc	967	mg/kg-dry		5		SW6010B	04/07/14 13:10 / sld	04/03/14 15:44	ICP2-HE_140407B	107	24079
Mercury	0.61	mg/kg-dry		0.10		SW7471B	04/09/14 14:09 / sbk	04/07/14 15:34	HGCV201-H_140409A	240	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Lab ID: H14030374-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
Report Date: 04/24/14
DateReceived: 03/26/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	28.2	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	35	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.9	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	39	R96228
3050 EXTRACTABLE METALS											
Aluminum	3440	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Arsenic	ND	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Barium	83	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Cadmium	0.6	mg/kg		0.2		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Chromium	6	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Copper	26	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Iron	5650	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Lead	11	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Manganese	276	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
Vanadium	13	mg/kg		1		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	37	24078
Zinc	90	mg/kg		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	66	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:12 / sbk	04/07/14 15:34	HGCV201-H_140409A	107	24117
METAL, DRY WEIGHT											
Aluminum	4400	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Lab ID: H14030374-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Arsenic	5	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Barium	106	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Cadmium	0.8	mg/kg-dry		0.2		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Chromium	7	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Copper	33	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Iron	7240	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Lead	14	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Manganese	353	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Vanadium	17	mg/kg-dry		1		SW6010B	04/08/14 14:56 / sld	04/03/14 15:44	ICP2-HE_140408C	121	24078
Zinc	115	mg/kg-dry		5		SW6020	04/10/14 21:54 / dck	04/03/14 15:44	ICPMS204-B_140411A	265	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:12 / sbk	04/07/14 15:34	HGCV201-H_140409A	241	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14030374-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	22.1	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	36	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.3	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	40	R96228
3050 EXTRACTABLE METALS											
Aluminum	3560	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Arsenic	ND	mg/kg		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Barium	71	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Cadmium	0.5	mg/kg		0.2		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Chromium	7	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Copper	21	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Iron	4510	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Lead	7	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Manganese	256	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	129	24077
Vanadium	9	mg/kg		1		SW6010B	04/08/14 17:12 / sld	04/03/14 15:42	ICP2-HE_140408C	74	24077
Zinc	53	mg/kg		5		SW6010B	04/16/14 19:08 / sld	04/15/14 07:32	ICP2-HE_140416D	42	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:22 / sbk	04/07/14 15:34	HGCV201-H_140409A	111	24117
METAL, DRY WEIGHT											
Aluminum	4520	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14030374-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/25/14 09:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Arsenic	ND	mg/kg-dry		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Barium	91	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Cadmium	0.6	mg/kg-dry		0.2		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Copper	27	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Iron	5730	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Lead	9	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Manganese	325	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 01:56 / dck	04/03/14 15:42	ICPMS204-B_140408B	161	24077
Vanadium	11	mg/kg-dry		1		SW6010B	04/08/14 17:12 / sld	04/03/14 15:39	ICP2-HE_140408C	158	24077
Zinc	68	mg/kg-dry		5		SW6010B	04/16/14 19:08 / sld	04/15/14 07:32	ICP2-HE_140416D	129	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:22 / sbk	04/07/14 15:34	HGCV201-H_140409A	245	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14030374-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.5	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	37	R96065
PHYSICAL CHARACTERISTICS											
Moisture	64.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	41	R96228
3050 EXTRACTABLE METALS											
Aluminum	9700	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	175	24079
Arsenic	11	mg/kg		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	175	24079
Barium	145	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Cadmium	2.1	mg/kg		0.2		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Chromium	9	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Copper	152	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Iron	9000	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Lead	52	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Manganese	711	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	175	24079
Nickel	ND	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	175	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	175	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	175	24079
Vanadium	21	mg/kg		1		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
Zinc	471	mg/kg		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:47	ICP2-HE_140407B	42	24079
METALS, TOTAL											
Mercury	0.22	mg/kg		0.10		SW7471B	04/09/14 14:24 / sbk	04/07/14 15:34	HGCV201-H_140409A	112	24117
METAL, DRY WEIGHT											
Aluminum	27300	mg/kg-dry		9		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14030374-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	214	24079
Arsenic	30	mg/kg-dry		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	214	24079
Barium	408	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Boron	13	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Cadmium	5.8	mg/kg-dry		0.2		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Chromium	25	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Copper	427	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Iron	25300	mg/kg-dry		8		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Lead	147	mg/kg-dry		9		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Manganese	2000	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	214	24079
Nickel	13	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	214	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	214	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 03:09 / dck	04/03/14 15:47	ICPMS204-B_140407B	214	24079
Vanadium	58	mg/kg-dry		2		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Zinc	1320	mg/kg-dry		5		SW6010B	04/07/14 13:13 / sld	04/03/14 15:44	ICP2-HE_140407B	108	24079
Mercury	0.61	mg/kg-dry		0.10		SW7471B	04/09/14 14:24 / sbk	04/07/14 15:34	HGCV201-H_140409A	246	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14030374-047
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	49.9	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	38	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	42	R96228
3050 EXTRACTABLE METALS											
Aluminum	4320	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Arsenic	ND	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Barium	137	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Cadmium	1.0	mg/kg		0.2		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Chromium	7	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Copper	32	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Iron	6500	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Lead	13	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Manganese	302	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
Vanadium	15	mg/kg		1		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	38	24078
Zinc	176	mg/kg		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	67	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:26 / sbk	04/07/14 15:34	HGCV201-H_140409A	113	24117
METAL, DRY WEIGHT											
Aluminum	5500	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14030374-047
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Arsenic	5	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Barium	174	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Cadmium	1.2	mg/kg-dry		0.2		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Copper	40	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Iron	8270	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Lead	17	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Manganese	384	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Vanadium	20	mg/kg-dry		1		SW6010B	04/08/14 15:00 / sld	04/03/14 15:44	ICP2-HE_140408C	122	24078
Zinc	224	mg/kg-dry		5		SW6020	04/10/14 21:58 / dck	04/03/14 15:44	ICPMS204-B_140411A	266	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:26 / sbk	04/07/14 15:34	HGCV201-H_140409A	247	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14030374-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	26.9	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	39	R96065
PHYSICAL CHARACTERISTICS											
Moisture	19.8	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	43	R96228
3050 EXTRACTABLE METALS											
Aluminum	5230	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Arsenic	ND	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Barium	224	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Cadmium	0.5	mg/kg		0.2		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Chromium	12	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Copper	16	mg/kg		5		SW6010B	04/16/14 19:19 / sld	04/15/14 07:32	ICP2-HE_140416D	45	24203
Iron	6740	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Lead	7	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Manganese	440	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Nickel	6	mg/kg		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	130	24077
Vanadium	15	mg/kg		1		SW6010B	04/08/14 17:16 / sld	04/03/14 15:42	ICP2-HE_140408C	75	24077
Zinc	77	mg/kg		5		SW6010B	04/16/14 19:19 / sld	04/15/14 07:32	ICP2-HE_140416D	45	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:34 / sbk	04/07/14 15:34	HGCV201-H_140409A	116	24117
METAL, DRY WEIGHT											
Aluminum	6520	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14030374-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 17:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Arsenic	6	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Barium	280	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Cadmium	0.6	mg/kg-dry		0.2		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Chromium	15	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Copper	20	mg/kg-dry		5		SW6010B	04/16/14 19:19 / sld	04/15/14 07:32	ICP2-HE_140416D	132	24203
Iron	8400	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Lead	8	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Manganese	549	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Nickel	7	mg/kg-dry		5		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 02:01 / dck	04/03/14 15:42	ICPMS204-B_140408B	162	24077
Vanadium	19	mg/kg-dry		1		SW6010B	04/08/14 17:16 / sld	04/03/14 15:39	ICP2-HE_140408C	159	24077
Zinc	96	mg/kg-dry		5		SW6010B	04/16/14 19:19 / sld	04/15/14 07:32	ICP2-HE_140416D	132	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:34 / sbk	04/07/14 15:34	HGCV201-H_140409A	250	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Lab ID: H14030374-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.6	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	40	R96065
PHYSICAL CHARACTERISTICS											
Moisture	66.5	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	44	R96228
3050 EXTRACTABLE METALS											
Aluminum	9940	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	179	24079
Arsenic	9	mg/kg		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	179	24079
Barium	126	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Cadmium	1.8	mg/kg		0.2		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Chromium	10	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Copper	130	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Iron	9500	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Lead	42	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Manganese	651	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	179	24079
Nickel	6	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	179	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	179	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	179	24079
Vanadium	20	mg/kg		1		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
Zinc	431	mg/kg		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:47	ICP2-HE_140407B	43	24079
METALS, TOTAL											
Mercury	0.20	mg/kg		0.10		SW7471B	04/09/14 14:36 / sbk	04/07/14 15:34	HGCV201-H_140409A	117	24117
METAL, DRY WEIGHT											
Aluminum	29700	mg/kg-dry		10		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Lab ID: H14030374-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	218	24079
Arsenic	28	mg/kg-dry		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	218	24079
Barium	377	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Boron	14	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Cadmium	5.3	mg/kg-dry		0.2		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Chromium	31	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Copper	387	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Iron	28400	mg/kg-dry		9		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Lead	124	mg/kg-dry		10		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Manganese	1940	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	218	24079
Nickel	18	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	218	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	218	24079
Uranium	ND	mg/kg-dry		5		SW6020	04/08/14 03:27 / dck	04/03/14 15:47	ICPMS204-B_140407B	218	24079
Vanadium	60	mg/kg-dry		2		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Zinc	1290	mg/kg-dry		5		SW6010B	04/07/14 13:17 / sld	04/03/14 15:44	ICP2-HE_140407B	109	24079
Mercury	0.59	mg/kg-dry		0.10		SW7471B	04/09/14 14:36 / sbk	04/07/14 15:34	HGCV201-H_140409A	251	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14030374-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	52.3	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	41	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.1	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	45	R96228
3050 EXTRACTABLE METALS											
Aluminum	3450	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Arsenic	6	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Barium	87	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Cadmium	0.4	mg/kg		0.2		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Chromium	7	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Copper	23	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Iron	9310	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Lead	11	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Manganese	242	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
Vanadium	25	mg/kg		1		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	39	24078
Zinc	105	mg/kg		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	68	24078
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:38 / sbk	04/07/14 15:34	HGCV201-H_140409A	118	24117
METAL, DRY WEIGHT											
Aluminum	4370	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14030374-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Arsenic	8	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Barium	110	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Cadmium	0.6	mg/kg-dry		0.2		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Copper	30	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Iron	11800	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Lead	14	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Manganese	306	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Vanadium	32	mg/kg-dry		1		SW6010B	04/08/14 15:04 / sld	04/03/14 15:44	ICP2-HE_140408C	123	24078
Zinc	133	mg/kg-dry		5		SW6020	04/10/14 22:03 / dck	04/03/14 15:44	ICPMS204-B_140411A	267	24078
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:38 / sbk	04/07/14 15:34	HGCV201-H_140409A	252	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14030374-051
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	17.4	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	42	R96065
PHYSICAL CHARACTERISTICS											
Moisture	22.7	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	47	R96228
3050 EXTRACTABLE METALS											
Aluminum	3800	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Arsenic	6	mg/kg		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Barium	112	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Cadmium	0.3	mg/kg		0.2		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Chromium	9	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Copper	20	mg/kg		5		SW6010B	04/11/14 17:37 / sld	04/09/14 14:37	ICP2-HE_140411A	66	24149
Iron	6830	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Lead	13	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Manganese	366	mg/kg		5		SW6010B	04/16/14 19:23 / sld	04/15/14 07:32	ICP2-HE_140416D	46	24203
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	131	24077
Vanadium	16	mg/kg		1		SW6010B	04/08/14 17:20 / sld	04/03/14 15:42	ICP2-HE_140408C	76	24077
Zinc	104	mg/kg		5		SW6010B	04/16/14 19:23 / sld	04/15/14 07:32	ICP2-HE_140416D	46	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/09/14 14:41 / sbk	04/07/14 15:34	HGCV201-H_140409A	119	24117
METAL, DRY WEIGHT											
Aluminum	4920	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14030374-051
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 16:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Arsenic	8	mg/kg-dry		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Barium	144	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Cadmium	0.4	mg/kg-dry		0.2		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Chromium	12	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Copper	26	mg/kg-dry		5		SW6010B	04/11/14 17:37 / sld	04/09/14 14:37	ICP2-HE_140411A	193	24149
Iron	8840	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Lead	17	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Manganese	473	mg/kg-dry		5		SW6010B	04/16/14 19:23 / sld	04/15/14 07:32	ICP2-HE_140416D	133	24203
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Nickel	5	mg/kg-dry		5		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 02:05 / dck	04/03/14 15:42	ICPMS204-B_140408B	163	24077
Vanadium	20	mg/kg-dry		1		SW6010B	04/08/14 17:20 / sld	04/03/14 15:39	ICP2-HE_140408C	160	24077
Zinc	135	mg/kg-dry		5		SW6010B	04/16/14 19:23 / sld	04/15/14 07:32	ICP2-HE_140416D	133	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/09/14 14:41 / sbk	04/07/14 15:34	HGCV201-H_140409A	253	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14030374-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	12.1	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	43	R96065
PHYSICAL CHARACTERISTICS											
Moisture	63.1	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	48	R96228
3050 EXTRACTABLE METALS											
Aluminum	11000	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	180	24079
Arsenic	38	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Barium	177	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Boron	6	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Cadmium	3.5	mg/kg		0.2		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Chromium	12	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Copper	492	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Iron	11600	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Lead	140	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Manganese	702	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	180	24079
Nickel	7	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	180	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	180	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	180	24079
Vanadium	23	mg/kg		1		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
Zinc	713	mg/kg		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:47	ICP2-HE_140407B	44	24079
METALS, TOTAL											
Mercury	1.0	mg/kg		0.10		SW7471B	04/09/14 15:13 / sbk	04/07/14 15:34	HGCV201-H_140409A	131	24117
METAL, DRY WEIGHT											
Aluminum	29900	mg/kg-dry		9		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14030374-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	219	24079
Arsenic	103	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Barium	480	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Boron	16	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Cadmium	9.6	mg/kg-dry		0.2		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Chromium	33	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Copper	1330	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Iron	31300	mg/kg-dry		8		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Lead	379	mg/kg-dry		8		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Manganese	1900	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	219	24079
Nickel	18	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	219	24079
Silver	7	mg/kg-dry		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	219	24079
Uranium	6	mg/kg-dry		5		SW6020	04/08/14 03:31 / dck	04/03/14 15:47	ICPMS204-B_140407B	219	24079
Vanadium	63	mg/kg-dry		2		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Zinc	1930	mg/kg-dry		5		SW6010B	04/07/14 13:21 / sld	04/03/14 15:44	ICP2-HE_140407B	110	24079
Mercury	2.8	mg/kg-dry		0.27		SW7471B	04/09/14 15:13 / sbk	04/07/14 15:34	HGCV201-H_140409A	265	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Lab ID: H14030374-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	46.5	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	44	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	49	R96228
3050 EXTRACTABLE METALS											
Aluminum	4430	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Arsenic	28	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Barium	106	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Cadmium	1.5	mg/kg		0.2		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Chromium	14	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Copper	162	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Iron	10200	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Lead	66	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Manganese	524	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Nickel	7	mg/kg		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
Vanadium	20	mg/kg		1		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	40	24078
Zinc	480	mg/kg		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	72	24078
METALS, TOTAL											
Mercury	0.36	mg/kg		0.10		SW7471B	04/09/14 14:47 / sbk	04/07/14 15:34	HGCV201-H_140409A	121	24117
METAL, DRY WEIGHT											
Aluminum	5630	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Lab ID: H14030374-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Arsenic	35	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Barium	135	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Cadmium	1.9	mg/kg-dry		0.2		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Chromium	17	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Copper	206	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Iron	13000	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Lead	83	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Manganese	667	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Nickel	9	mg/kg-dry		5		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Vanadium	26	mg/kg-dry		1		SW6010B	04/08/14 15:07 / sld	04/03/14 15:44	ICP2-HE_140408C	124	24078
Zinc	611	mg/kg-dry		5		SW6020	04/10/14 22:21 / dck	04/03/14 15:44	ICPMS204-B_140411A	271	24078
Mercury	0.45	mg/kg-dry		0.10		SW7471B	04/09/14 14:47 / sbk	04/07/14 15:34	HGCV201-H_140409A	255	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14030374-054
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	30.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	45	R96065
PHYSICAL CHARACTERISTICS											
Moisture	23.9	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	50	R96228
3050 EXTRACTABLE METALS											
Aluminum	5480	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	132	24077
Arsenic	27	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Barium	116	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Cadmium	0.6	mg/kg		0.2		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	132	24077
Chromium	22	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Copper	138	mg/kg		5		SW6010B	04/16/14 19:27 / sld	04/15/14 07:32	ICP2-HE_140416D	47	24203
Iron	9190	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Lead	47	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Manganese	379	mg/kg		5		SW6010B	04/16/14 19:27 / sld	04/15/14 07:32	ICP2-HE_140416D	47	24203
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	132	24077
Nickel	9	mg/kg		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	132	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	132	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	132	24077
Vanadium	17	mg/kg		1		SW6010B	04/08/14 17:24 / sld	04/03/14 15:42	ICP2-HE_140408C	77	24077
Zinc	159	mg/kg		5		SW6010B	04/16/14 19:27 / sld	04/15/14 07:32	ICP2-HE_140416D	47	24203
METALS, TOTAL											
Mercury	0.15	mg/kg		0.10		SW7471B	04/09/14 14:49 / sbk	04/07/14 15:34	HGCV201-H_140409A	122	24117
METAL, DRY WEIGHT											
Aluminum	7200	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14030374-054
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 14:30
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	164	24077
Arsenic	35	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Barium	152	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Cadmium	0.8	mg/kg-dry		0.2		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	164	24077
Chromium	29	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Copper	181	mg/kg-dry		5		SW6010B	04/16/14 19:27 / sld	04/15/14 07:32	ICP2-HE_140416D	134	24203
Iron	12100	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Lead	62	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Manganese	498	mg/kg-dry		5		SW6010B	04/16/14 19:27 / sld	04/15/14 07:32	ICP2-HE_140416D	134	24203
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	164	24077
Nickel	12	mg/kg-dry		5		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	164	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	164	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 02:10 / dck	04/03/14 15:42	ICPMS204-B_140408B	164	24077
Vanadium	23	mg/kg-dry		1		SW6010B	04/08/14 17:24 / sld	04/03/14 15:39	ICP2-HE_140408C	161	24077
Zinc	209	mg/kg-dry		5		SW6010B	04/16/14 19:27 / sld	04/15/14 07:32	ICP2-HE_140416D	134	24203
Mercury	0.20	mg/kg-dry		0.10		SW7471B	04/09/14 14:49 / sbk	04/07/14 15:34	HGCV201-H_140409A	256	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14030374-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.8	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	46	R96065
PHYSICAL CHARACTERISTICS											
Moisture	56.0	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	51	R96228
3050 EXTRACTABLE METALS											
Aluminum	12600	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	181	24079
Arsenic	32	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Barium	184	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Boron	5	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Cadmium	2.6	mg/kg		0.2		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Chromium	18	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Copper	312	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Iron	13300	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Lead	109	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Manganese	803	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	181	24079
Nickel	10	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	181	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	181	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	181	24079
Vanadium	26	mg/kg		1		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
Zinc	423	mg/kg		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:47	ICP2-HE_140407B	45	24079
METALS, TOTAL											
Mercury	0.63	mg/kg		0.10		SW7471B	04/09/14 15:16 / sbk	04/07/14 15:34	HGCV201-H_140409A	132	24117
METAL, DRY WEIGHT											
Aluminum	28500	mg/kg-dry		7		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14030374-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	220	24079
Arsenic	73	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Barium	419	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Boron	12	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Cadmium	5.9	mg/kg-dry		0.2		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Chromium	40	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Cobalt	ND	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Copper	710	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Iron	30200	mg/kg-dry		6		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Lead	247	mg/kg-dry		7		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Manganese	1820	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	220	24079
Nickel	22	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	220	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	220	24079
Uranium	5	mg/kg-dry		5		SW6020	04/08/14 03:36 / dck	04/03/14 15:47	ICPMS204-B_140407B	220	24079
Vanadium	60	mg/kg-dry		2		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Zinc	962	mg/kg-dry		5		SW6010B	04/07/14 13:24 / sld	04/03/14 15:44	ICP2-HE_140407B	111	24079
Mercury	1.4	mg/kg-dry		0.22		SW7471B	04/09/14 15:16 / sbk	04/07/14 15:34	HGCV201-H_140409A	266	24117

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Lab ID: H14030374-056
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	37.5	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	47	R96065
PHYSICAL CHARACTERISTICS											
Moisture	21.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	52	R96228
3050 EXTRACTABLE METALS											
Aluminum	4090	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Arsenic	38	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Barium	107	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Cadmium	2.2	mg/kg		0.2		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Chromium	14	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Copper	146	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Iron	15700	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Lead	60	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Manganese	497	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Molybdenum	7	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Nickel	6	mg/kg		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
Vanadium	37	mg/kg		1		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	41	24078
Zinc	712	mg/kg		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	73	24078
METALS, TOTAL											
Mercury	0.28	mg/kg		0.10		SW7471B	04/10/14 15:43 / sbk	04/09/14 08:57	HGCV201-H_140410A	12	24131
METAL, DRY WEIGHT											
Aluminum	5200	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Lab ID: H14030374-056
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Arsenic	49	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Barium	137	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Cadmium	2.8	mg/kg-dry		0.2		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Chromium	17	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Copper	186	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Iron	19900	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Lead	77	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Manganese	632	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Molybdenum	9	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Nickel	8	mg/kg-dry		5		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Vanadium	47	mg/kg-dry		1		SW6010B	04/08/14 15:11 / sld	04/03/14 15:44	ICP2-HE_140408C	125	24078
Zinc	906	mg/kg-dry		5		SW6020	04/10/14 22:25 / dck	04/03/14 15:44	ICPMS204-B_140411A	272	24078
Mercury	0.35	mg/kg-dry		0.10		SW7471B	04/10/14 15:43 / sbk	04/09/14 08:57	HGCV201-H_140410A	47	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14030374-057
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	31.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	48	R96065
PHYSICAL CHARACTERISTICS											
Moisture	18.9	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	53	R96228
3050 EXTRACTABLE METALS											
Aluminum	5010	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	133	24077
Arsenic	33	mg/kg		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	68	24149
Barium	112	mg/kg		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	68	24149
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Cadmium	1.0	mg/kg		0.2		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	133	24077
Chromium	15	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Copper	154	mg/kg		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	68	24149
Iron	11900	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Lead	60	mg/kg		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	68	24149
Manganese	452	mg/kg		5		SW6010B	04/16/14 19:30 / sld	04/15/14 07:32	ICP2-HE_140416D	48	24203
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	133	24077
Nickel	6	mg/kg		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:42	ICP2-HE_140408C	80	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	133	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	133	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	133	24077
Vanadium	17	mg/kg		1		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	68	24149
Zinc	204	mg/kg		5		SW6010B	04/16/14 19:30 / sld	04/15/14 07:32	ICP2-HE_140416D	48	24203
METALS, TOTAL											
Mercury	0.13	mg/kg		0.10		SW7471B	04/10/14 15:45 / sbk	04/09/14 08:57	HGCV201-H_140410A	13	24131
METAL, DRY WEIGHT											
Aluminum	6180	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14030374-057
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 13:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	165	24077
Arsenic	41	mg/kg-dry		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	195	24149
Barium	138	mg/kg-dry		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	195	24149
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077
Cadmium	1.2	mg/kg-dry		0.2		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	165	24077
Chromium	18	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077
Copper	190	mg/kg-dry		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	195	24149
Iron	14700	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077
Lead	74	mg/kg-dry		5		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	195	24149
Manganese	557	mg/kg-dry		5		SW6010B	04/16/14 19:30 / sld	04/15/14 07:32	ICP2-HE_140416D	135	24203
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	165	24077
Nickel	8	mg/kg-dry		5		SW6010B	04/08/14 17:35 / sld	04/03/14 15:39	ICP2-HE_140408C	164	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	165	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	165	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 02:14 / dck	04/03/14 15:42	ICPMS204-B_140408B	165	24077
Vanadium	21	mg/kg-dry		1		SW6010B	04/11/14 17:44 / sld	04/09/14 14:37	ICP2-HE_140411A	195	24149
Zinc	251	mg/kg-dry		5		SW6010B	04/16/14 19:30 / sld	04/15/14 07:32	ICP2-HE_140416D	135	24203
Mercury	0.16	mg/kg-dry		0.10		SW7471B	04/10/14 15:45 / sbk	04/09/14 08:57	HGCV201-H_140410A	48	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14030374-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.6	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	49	R96065
PHYSICAL CHARACTERISTICS											
Moisture	62.2	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	54	R96228
3050 EXTRACTABLE METALS											
Aluminum	12400	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	182	24079
Arsenic	41	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Barium	151	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Cadmium	2.1	mg/kg		0.2		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Chromium	19	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Copper	303	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Iron	16100	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Lead	156	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Manganese	1010	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	182	24079
Nickel	9	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	182	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	182	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	182	24079
Vanadium	38	mg/kg		1		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
Zinc	571	mg/kg		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:47	ICP2-HE_140407B	46	24079
METALS, TOTAL											
Mercury	0.80	mg/kg		0.10		SW7471B	04/10/14 16:35 / sbk	04/09/14 08:57	HGCV201-H_140410A	32	24131
METAL, DRY WEIGHT											
Aluminum	32800	mg/kg-dry		8		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14030374-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	221	24079
Arsenic	109	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Barium	399	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Boron	11	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Cadmium	5.7	mg/kg-dry		0.2		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Chromium	51	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Cobalt	6	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Copper	801	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Iron	42400	mg/kg-dry		7		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Lead	413	mg/kg-dry		8		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Manganese	2660	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	221	24079
Nickel	25	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	221	24079
Silver	5	mg/kg-dry		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	221	24079
Uranium	6	mg/kg-dry		5		SW6020	04/08/14 03:40 / dck	04/03/14 15:47	ICPMS204-B_140407B	221	24079
Vanadium	100	mg/kg-dry		2		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Zinc	1510	mg/kg-dry		5		SW6010B	04/07/14 13:28 / sld	04/03/14 15:44	ICP2-HE_140407B	112	24079
Mercury	2.1	mg/kg-dry		0.26		SW7471B	04/10/14 16:35 / sbk	04/09/14 08:57	HGCV201-H_140410A	67	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Lab ID: H14030374-059
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	48.2	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	50	R96065
PHYSICAL CHARACTERISTICS											
Moisture	19.9	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	55	R96228
3050 EXTRACTABLE METALS											
Aluminum	3470	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Arsenic	28	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Barium	76	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Cadmium	1.0	mg/kg		0.2		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Chromium	12	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Copper	108	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Iron	18700	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Lead	53	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Manganese	417	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
Vanadium	55	mg/kg		1		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	42	24078
Zinc	377	mg/kg		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	74	24078
METALS, TOTAL											
Mercury	0.19	mg/kg		0.10		SW7471B	04/10/14 15:51 / sbk	04/09/14 08:57	HGCV201-H_140410A	15	24131
METAL, DRY WEIGHT											
Aluminum	4330	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Lab ID: H14030374-059
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Arsenic	35	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Barium	95	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Cadmium	1.2	mg/kg-dry		0.2		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Chromium	15	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Copper	135	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Iron	23300	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Lead	67	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Manganese	521	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Vanadium	69	mg/kg-dry		1		SW6010B	04/08/14 15:15 / sld	04/03/14 15:44	ICP2-HE_140408C	126	24078
Zinc	471	mg/kg-dry		5		SW6020	04/10/14 22:29 / dck	04/03/14 15:44	ICPMS204-B_140411A	273	24078
Mercury	0.24	mg/kg-dry		0.10		SW7471B	04/10/14 15:51 / sbk	04/09/14 08:57	HGCV201-H_140410A	50	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14030374-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	25.2	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	51	R96065
PHYSICAL CHARACTERISTICS											
Moisture	20.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	56	R96228
3050 EXTRACTABLE METALS											
Aluminum	3590	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Antimony	ND	mg/kg		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	134	24077
Arsenic	33	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Barium	68	mg/kg		5		SW6010B	04/11/14 18:21 / sld	04/09/14 14:37	ICP2-HE_140411A	78	24149
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Cadmium	0.8	mg/kg		0.2		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	134	24077
Chromium	9	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Copper	97	mg/kg		5		SW6010B	04/11/14 18:21 / sld	04/09/14 14:37	ICP2-HE_140411A	78	24149
Iron	8000	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Lead	42	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Manganese	409	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Molybdenum	ND	mg/kg		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	134	24077
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Selenium	ND	mg/kg		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	134	24077
Silver	ND	mg/kg		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	134	24077
Uranium	ND	mg/kg		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	134	24077
Vanadium	19	mg/kg		1		SW6010B	04/08/14 17:38 / sld	04/03/14 15:42	ICP2-HE_140408C	81	24077
Zinc	245	mg/kg		5		SW6010B	04/16/14 19:34 / sld	04/15/14 07:32	ICP2-HE_140416D	49	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/10/14 15:54 / sbk	04/09/14 08:57	HGCV201-H_140410A	16	24131
METAL, DRY WEIGHT											
Aluminum	4510	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14030374-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 11:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	166	24077
Arsenic	42	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Barium	86	mg/kg-dry		5		SW6010B	04/11/14 18:21 / sld	04/09/14 14:37	ICP2-HE_140411A	205	24149
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Cadmium	1.0	mg/kg-dry		0.2		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	166	24077
Chromium	12	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Copper	122	mg/kg-dry		5		SW6010B	04/11/14 18:21 / sld	04/09/14 14:37	ICP2-HE_140411A	205	24149
Iron	10100	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Lead	53	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Manganese	514	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Molybdenum	ND	mg/kg-dry		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	166	24077
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	166	24077
Silver	ND	mg/kg-dry		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	166	24077
Uranium	ND	mg/kg-dry		5		SW6020	04/09/14 02:19 / dck	04/03/14 15:42	ICPMS204-B_140408B	166	24077
Vanadium	24	mg/kg-dry		1		SW6010B	04/08/14 17:38 / sld	04/03/14 15:39	ICP2-HE_140408C	165	24077
Zinc	308	mg/kg-dry		5		SW6010B	04/16/14 19:34 / sld	04/15/14 07:32	ICP2-HE_140416D	136	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/10/14 15:54 / sbk	04/09/14 08:57	HGCV201-H_140410A	51	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14030374-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	0.9	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	52	R96065
PHYSICAL CHARACTERISTICS											
Moisture	58.9	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	58	R96228
3050 EXTRACTABLE METALS											
Aluminum	10500	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	183	24079
Arsenic	29	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Barium	145	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Cadmium	2.5	mg/kg		0.2		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Chromium	25	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Copper	263	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Iron	16900	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Lead	106	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Manganese	876	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	183	24079
Nickel	12	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	183	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	183	24079
Uranium	ND	mg/kg		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	183	24079
Vanadium	48	mg/kg		1		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
Zinc	513	mg/kg		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:47	ICP2-HE_140407B	47	24079
METALS, TOTAL											
Mercury	0.46	mg/kg		0.10		SW7471B	04/10/14 16:38 / sbk	04/09/14 08:57	HGCV201-H_140410A	33	24131
METAL, DRY WEIGHT											
Aluminum	25500	mg/kg-dry		8		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14030374-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	222	24079
Arsenic	70	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Barium	354	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Boron	10	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Cadmium	6.1	mg/kg-dry		0.2		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Chromium	61	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Cobalt	6	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Copper	640	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Iron	41100	mg/kg-dry		7		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Lead	259	mg/kg-dry		8		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Manganese	2130	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Molybdenum	ND	mg/kg-dry		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	222	24079
Nickel	29	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	222	24079
Silver	ND	mg/kg-dry		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	222	24079
Uranium	6	mg/kg-dry		5		SW6020	04/08/14 03:45 / dck	04/03/14 15:47	ICPMS204-B_140407B	222	24079
Vanadium	116	mg/kg-dry		2		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Zinc	1250	mg/kg-dry		5		SW6010B	04/07/14 13:31 / sld	04/03/14 15:44	ICP2-HE_140407B	113	24079
Mercury	1.1	mg/kg-dry		0.10		SW7471B	04/10/14 16:38 / sbk	04/09/14 08:57	HGCV201-H_140410A	68	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Lab ID: H14030374-062
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	22.4	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	53	R96065
PHYSICAL CHARACTERISTICS											
Moisture	20.4	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	59	R96228
3050 EXTRACTABLE METALS											
Aluminum	2910	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Antimony	ND	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Arsenic	14	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Barium	62	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Cadmium	0.7	mg/kg		0.2		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Chromium	9	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Copper	52	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Iron	12300	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Lead	22	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Manganese	317	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Molybdenum	ND	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Selenium	ND	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Silver	ND	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Uranium	ND	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
Vanadium	36	mg/kg		1		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	43	24078
Zinc	202	mg/kg		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	75	24078
METALS, TOTAL											
Mercury	0.15	mg/kg		0.10		SW7471B	04/10/14 15:59 / sbk	04/09/14 08:57	HGCV201-H_140410A	18	24131
METAL, DRY WEIGHT											
Aluminum	3660	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Lab ID: H14030374-062
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Arsenic	18	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Barium	78	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Cadmium	0.8	mg/kg-dry		0.2		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Chromium	12	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Copper	66	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Iron	15500	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Lead	27	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Manganese	398	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Silver	ND	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Vanadium	46	mg/kg-dry		1		SW6010B	04/08/14 15:18 / sld	04/03/14 15:44	ICP2-HE_140408C	127	24078
Zinc	254	mg/kg-dry		5		SW6020	04/10/14 22:34 / dck	04/03/14 15:44	ICPMS204-B_140411A	274	24078
Mercury	0.19	mg/kg-dry		0.10		SW7471B	04/10/14 15:59 / sbk	04/09/14 08:57	HGCV201-H_140410A	53	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14030374-063
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	33.2	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	54	R96065
PHYSICAL CHARACTERISTICS											
Moisture	14.5	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	60	R96228
3050 EXTRACTABLE METALS											
Aluminum	2660	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Antimony	ND	mg/kg		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	21	24203
Arsenic	16	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Barium	51	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Cadmium	0.7	mg/kg		0.2		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	21	24203
Chromium	7	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Copper	50	mg/kg		5		SW6010B	04/16/14 19:38 / sld	04/15/14 07:32	ICP2-HE_140416D	50	24203
Iron	7070	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Lead	21	mg/kg		5		SW6010B	04/11/14 18:25 / sld	04/09/14 14:37	ICP2-HE_140411A	79	24149
Manganese	296	mg/kg		5		SW6010B	04/16/14 19:38 / sld	04/15/14 07:32	ICP2-HE_140416D	50	24203
Molybdenum	ND	mg/kg		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	21	24203
Nickel	ND	mg/kg		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Selenium	ND	mg/kg		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	21	24203
Silver	ND	mg/kg		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	21	24203
Uranium	ND	mg/kg		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	21	24203
Vanadium	16	mg/kg		1		SW6010B	04/08/14 17:42 / sld	04/03/14 15:42	ICP2-HE_140408C	82	24077
Zinc	105	mg/kg		5		SW6010B	04/16/14 19:38 / sld	04/15/14 07:32	ICP2-HE_140416D	50	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/10/14 16:01 / sbk	04/09/14 08:57	HGCV201-H_140410A	19	24131
METAL, DRY WEIGHT											
Aluminum	3110	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14030374-063
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 10:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	44	24203
Arsenic	18	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Barium	59	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Cadmium	0.8	mg/kg-dry		0.2		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	44	24203
Chromium	8	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Copper	88	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Iron	8270	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Lead	25	mg/kg-dry		5		SW6010B	04/11/14 18:25 / sld	04/09/14 14:37	ICP2-HE_140411A	206	24149
Manganese	346	mg/kg-dry		5		SW6010B	04/16/14 19:38 / sld	04/15/14 07:32	ICP2-HE_140416D	137	24203
Molybdenum	ND	mg/kg-dry		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	44	24203
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	44	24203
Silver	ND	mg/kg-dry		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	44	24203
Uranium	ND	mg/kg-dry		5		SW6020	04/17/14 11:14 / dck	04/15/14 07:32	ICPMS204-B_140417A	44	24203
Vanadium	18	mg/kg-dry		1		SW6010B	04/08/14 17:42 / sld	04/03/14 15:39	ICP2-HE_140408C	166	24077
Zinc	123	mg/kg-dry		5		SW6010B	04/16/14 19:38 / sld	04/15/14 07:32	ICP2-HE_140416D	137	24203
Mercury	ND	mg/kg-dry		0.10		SW7471B	04/10/14 16:01 / sbk	04/09/14 08:57	HGCV201-H_140410A	54	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve <0.065mm
Lab ID: H14030374-064
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.5	wt% Passed		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	55	R96065
PHYSICAL CHARACTERISTICS											
Moisture	52.3	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	61	R96228
3050 EXTRACTABLE METALS											
Aluminum	13200	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Antimony	ND	mg/kg		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	184	24079
Arsenic	60	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Barium	166	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Beryllium	ND	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Boron	ND	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Cadmium	9.4	mg/kg		0.2		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Chromium	21	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Cobalt	ND	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Copper	1510	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Iron	20200	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Lead	164	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Manganese	472	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Molybdenum	ND	mg/kg		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	184	24079
Nickel	10	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Selenium	ND	mg/kg		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	184	24079
Silver	ND	mg/kg		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	184	24079
Uranium	8	mg/kg		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	184	24079
Vanadium	38	mg/kg		1		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
Zinc	1090	mg/kg		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:47	ICP2-HE_140407B	48	24079
METALS, TOTAL											
Mercury	1.5	mg/kg		0.10		SW7471B	04/10/14 16:07 / sbk	04/09/14 08:57	HGCV201-H_140410A	20	24131
METAL, DRY WEIGHT											
Aluminum	27600	mg/kg-dry		7		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve <0.065mm
Lab ID: H14030374-064
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	223	24079
Arsenic	127	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Barium	348	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Beryllium	ND	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Boron	8	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Cadmium	19.8	mg/kg-dry		0.2		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Chromium	44	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Cobalt	7	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Copper	3170	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Iron	42500	mg/kg-dry		6		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Lead	345	mg/kg-dry		7		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Manganese	990	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Molybdenum	7	mg/kg-dry		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	223	24079
Nickel	21	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Selenium	ND	mg/kg-dry		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	223	24079
Silver	6	mg/kg-dry		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	223	24079
Uranium	16	mg/kg-dry		5		SW6020	04/08/14 03:49 / dck	04/03/14 15:47	ICPMS204-B_140407B	223	24079
Vanadium	80	mg/kg-dry		2		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Zinc	2290	mg/kg-dry		5		SW6010B	04/07/14 13:35 / sld	04/03/14 15:44	ICP2-HE_140407B	114	24079
Mercury	3.2	mg/kg-dry		0.21		SW7471B	04/10/14 16:07 / sbk	04/09/14 08:57	HGCV201-H_140410A	55	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 0.065-1mm
Lab ID: H14030374-065
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	74.8	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	56	R96065
PHYSICAL CHARACTERISTICS											
Moisture	19.5	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	62	R96228
3050 EXTRACTABLE METALS											
Aluminum	3930	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Antimony	ND	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Arsenic	14	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Barium	109	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Boron	ND	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Cadmium	0.8	mg/kg		0.2		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Chromium	7	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Copper	122	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Iron	7070	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Lead	33	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Manganese	204	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Molybdenum	ND	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Nickel	ND	mg/kg		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Selenium	ND	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Silver	ND	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
Uranium	ND	mg/kg		5		SW6020	04/11/14 20:46 / dck	04/03/14 15:44	ICPMS204-B_140411C	52	24078
Vanadium	19	mg/kg		1		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	44	24078
Zinc	174	mg/kg		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	210	24078
METALS, TOTAL											
Mercury	0.21	mg/kg		0.10		SW7471B	04/10/14 16:14 / sbk	04/09/14 08:57	HGCV201-H_140410A	23	24131
METAL, DRY WEIGHT											
Aluminum	4890	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 0.065-1mm
Lab ID: H14030374-065
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Arsenic	18	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Barium	135	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Cadmium	1.0	mg/kg-dry		0.2		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Chromium	9	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Copper	152	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Iron	8790	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Lead	42	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Manganese	253	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Molybdenum	ND	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Nickel	ND	mg/kg-dry		5		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Selenium	ND	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Silver	ND	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Uranium	ND	mg/kg-dry		5		SW6020	04/11/14 20:46 / dck	04/03/14 15:44	ICPMS204-B_140411C	103	24078
Vanadium	23	mg/kg-dry		1		SW6010B	04/08/14 15:22 / sld	04/03/14 15:44	ICP2-HE_140408C	128	24078
Zinc	216	mg/kg-dry		5		SW6020	04/11/14 10:33 / dck	04/03/14 15:44	ICPMS204-B_140411A	289	24078
Mercury	0.26	mg/kg-dry		0.10		SW7471B	04/10/14 16:14 / sbk	04/09/14 08:57	HGCV201-H_140410A	58	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 1-2mm
Lab ID: H14030374-066
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	8.7	wt% retained		0.1		ASA15-2	03/31/14 12:02 / raw		MISC SOILS_140331A	57	R96065
PHYSICAL CHARACTERISTICS											
Moisture	24.7	wt%		0.2		D2974	04/14/14 10:45 / raw		RYING OVEN 2_140404A	63	R96228
3050 EXTRACTABLE METALS											
Aluminum	4010	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Antimony	ND	mg/kg		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	26	24203
Arsenic	12	mg/kg		5		SW6010B	04/11/14 18:43 / sld	04/09/14 14:37	ICP2-HE_140411A	84	24149
Barium	132	mg/kg		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	57	24203
Beryllium	ND	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Boron	ND	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Cadmium	0.5	mg/kg		0.2		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	26	24203
Chromium	11	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Cobalt	ND	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Copper	66	mg/kg		5		SW6010B	04/11/14 18:43 / sld	04/09/14 14:37	ICP2-HE_140411A	84	24149
Iron	6610	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Lead	38	mg/kg		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	57	24203
Manganese	190	mg/kg		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	57	24203
Molybdenum	ND	mg/kg		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	26	24203
Nickel	ND	mg/kg		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Selenium	ND	mg/kg		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	26	24203
Silver	ND	mg/kg		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	26	24203
Uranium	ND	mg/kg		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	26	24203
Vanadium	17	mg/kg		1		SW6010B	04/08/14 18:00 / sld	04/03/14 15:42	ICP2-HE_140408C	87	24077
Zinc	110	mg/kg		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	57	24203
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	04/10/14 16:16 / sbk	04/09/14 08:57	HGCV201-H_140410A	24	24131
METAL, DRY WEIGHT											
Aluminum	5320	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 1-2mm
Lab ID: H14030374-066
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 03/24/14 09:00
DateReceived: 03/26/14
Report Date: 04/24/14
Revised Date: 05/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	45	24203
Arsenic	16	mg/kg-dry		5		SW6010B	04/11/14 18:43 / sld	04/09/14 14:37	ICP2-HE_140411A	211	24149
Barium	175	mg/kg-dry		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	144	24203
Beryllium	ND	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Boron	ND	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Cadmium	0.7	mg/kg-dry		0.2		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	45	24203
Chromium	14	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Cobalt	ND	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Copper	88	mg/kg-dry		5		SW6010B	04/11/14 18:43 / sld	04/09/14 14:37	ICP2-HE_140411A	211	24149
Iron	8780	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Lead	50	mg/kg-dry		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	144	24203
Manganese	252	mg/kg-dry		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	144	24203
Molybdenum	ND	mg/kg-dry		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	45	24203
Nickel	6	mg/kg-dry		5		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Selenium	ND	mg/kg-dry		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	45	24203
Silver	ND	mg/kg-dry		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	45	24203
Uranium	ND	mg/kg-dry		5		SW6020	04/17/14 11:36 / dck	04/15/14 07:32	ICPMS204-B_140417A	45	24203
Vanadium	22	mg/kg-dry		1		SW6010B	04/08/14 18:00 / sld	04/03/14 15:39	ICP2-HE_140408C	171	24077
Zinc	146	mg/kg-dry		5		SW6010B	04/16/14 20:03 / sld	04/15/14 07:32	ICP2-HE_140416D	144	24203
Mercury	0.11	mg/kg-dry		0.10		SW7471B	04/10/14 16:16 / sbk	04/09/14 08:57	HGCV201-H_140410A	59	24131

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140328wa

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **03/28/14 09:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **03/28/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		97	95	105				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **03/28/14 11:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		101	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B**

Run ID :Run Order: **HGCV202-H_140328B: 48** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **03/28/14 12:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		108	90	110				

Associated samples: **H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Run ID :Run Order: **HGCV202-H_140328B: 77** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **03/28/14 14:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		110	90	110				

Associated samples: **H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140328wa

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **03/28/14 09:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **03/28/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		97	95	105				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **03/28/14 11:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		101	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B**

Run ID :Run Order: **HGCV202-H_140328B: 48** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **03/28/14 12:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		108	90	110				

Associated samples: **H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Run ID :Run Order: **HGCV202-H_140328B: 77** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **03/28/14 14:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		110	90	110				

Associated samples: **H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140401wa

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140401A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **04/01/14 10:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		96	90	110				

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **HGCV202-H_140401A: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **04/01/14 11:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		96	90	110				

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **HGCV202-H_140401A: 8** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **04/01/14 11:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		99	95	105				

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **HGCV202-H_140401A: 25** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **04/01/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Run ID :Run Order: **HGCV202-H_140401A: 39** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **04/01/14 13:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		99	90	110				

Associated samples: **H14030374-018B; H14030374-018C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140409sa

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **04/09/14 09:49** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00092	0.50	0.001		92	90	110				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B; H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Run ID :Run Order: **HGCV201-H_140409A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **04/09/14 11:48** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		104	90	110				

Associated samples: **H14030374-019A**

Run ID :Run Order: **HGCV201-H_140409A: 65** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **04/09/14 12:30** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		105	90	110				

Associated samples: **H14030374-020A; H14030374-021A; H14030374-022A; H14030374-023A; H14030374-024A; H14030374-026A; H14030374-027A; H14030374-028A; H14030374-029A**

Run ID :Run Order: **HGCV201-H_140409A: 83** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **04/09/14 13:14** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		106	90	110				

Associated samples: **H14030374-030A; H14030374-031A; H14030374-032A; H14030374-033A; H14030374-034A; H14030374-035A; H14030374-036A; H14030374-037A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140409sa

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 96** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 13:45** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		107	90	110				

Associated samples: **H14030374-038A; H14030374-039A; H14030374-040A; H14030374-041A; H14030374-042A; H14030374-043A; H14030374-044A; H14030374-045A; H14030374-046A; H14030374-047A**

Run ID :Run Order: **HGCV201-H_140409A: 114** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 14:29** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		107	90	110				

Associated samples: **H14030374-048A; H14030374-049A; H14030374-050A; H14030374-051A; H14030374-053A; H14030374-054A**

Run ID :Run Order: **HGCV201-H_140409A: 127** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 15:03** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		106	90	110				

Associated samples: **H14030374-025A; H14030374-052A; H14030374-055A**

Run ID :Run Order: **HGCV201-H_140409A: 133** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **04/09/14 15:18** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		105	90	110				

Associated samples:

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140410sa

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140410A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **04/10/14 15:12** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00093	0.50	0.001		93	90	110				

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **04/10/14 15:14** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		102	90	110				

Associated samples: **H14030374-056A; H14030374-057A; H14030374-059A; H14030374-060A; H14030374-062A; H14030374-063A; H14030374-064A**

Run ID :Run Order: **HGCV201-H_140410A: 21** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **04/10/14 16:09** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		102	90	110				

Associated samples: **H14030374-058A; H14030374-061A; H14030374-065A; H14030374-066A**

Run ID :Run Order: **HGCV201-H_140410A: 34** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **04/10/14 16:40** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		103	90	110				

Associated samples:

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23976

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 33** SampType: **Method Blank** Lab ID: **MB-23976** Method: **E245.1**
Analysis Date: **03/28/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: **3/26/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	3E-06									

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Run ID :Run Order: **HGCV202-H_140328B: 34** SampType: **Laboratory Control Sample** Lab ID: **LCS-23976** Method: **E245.1**
Analysis Date: **03/28/14 11:57** Units: **mg/L** **Prep Info:** Prep Date: **3/26/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015		102	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Run ID :Run Order: **HGCV202-H_140328B: 40** SampType: **Sample Matrix Spike** Lab ID: **H14030371-003BMS** Method: **E245.1**
Analysis Date: **03/28/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		107	70	130				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Run ID :Run Order: **HGCV202-H_140328B: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-003BMSD** Method: **E245.1**
Analysis Date: **03/28/14 12:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		108	70	130	0.0001605	0.8	20	

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Run ID :Run Order: **HGCV202-H_140328B: 56** SampType: **Sample Matrix Spike** Lab ID: **H14030374-006BMS** Method: **E245.1**
Analysis Date: **03/28/14 13:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		107	70	130				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23976

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 57** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-006BMSD** Method: **E245.1**

Analysis Date: **03/28/14 13:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		109	70	130	0.0001602	2.2	20	

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 130** SampType: **Method Blank** Lab ID: **MB-23989** Method: **E200.8**

Analysis Date: **03/28/14 19:49** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.002	0.0006									
Antimony	5E-05	3E-05									
Arsenic	0.0001	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Boron	ND	0.001									
Cadmium	ND	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.004	0.002									
Lead	ND	3E-05									
Magnesium	0.002	0.002									
Manganese	0.0003	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									
Selenium	ND	0.0002									
Silver	0.0001	7E-05									
Sodium	0.06	0.03									
Uranium	ND	3E-05									
Vanadium	0.0002	7E-05									
Zinc	0.005	0.001									

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 131** SampType: **Laboratory Control Sample** Lab ID: **LCS-23989** Method: **E200.8**

Analysis Date: **03/28/14 19:54** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.49	0.030	2.5	0.002047	99	85	115				
Antimony	0.481	0.0010	0.5	0.0000535	96	85	115				
Arsenic	0.504	0.0010	0.5	0.0001143	101	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 131** SampType: **Laboratory Control Sample** Lab ID: **LCS-23989** Method: **E200.8**

Analysis Date: **03/28/14 19:54** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.445	0.050	0.5		89	85	115				
Beryllium	0.253	0.0010	0.25		101	85	115				
Boron	0.536	0.050	0.5		107	85	115				
Cadmium	0.231	0.0010	0.25		92	85	115				
Calcium	26.4	1.0	25		105	85	115				
Chromium	0.463	0.0050	0.5		93	85	115				
Cobalt	0.482	0.0050	0.5		96	85	115				
Copper	0.459	0.0050	0.5		92	85	115				
Iron	2.56	0.020	2.5	0.004071	102	85	115				
Lead	0.464	0.0010	0.5		93	85	115				
Magnesium	25.6	1.0	25	0.001937	102	85	115				
Manganese	2.50	0.0010	2.5	0.0002872	100	85	115				
Molybdenum	0.491	0.0010	0.5		98	85	115				
Nickel	0.496	0.0050	0.5		99	85	115				
Potassium	25.3	1.0	25		101	85	115				
Selenium	0.533	0.0010	0.5		107	85	115				
Silver	0.0494	0.0010	0.05	0.0001067	99	85	115				
Sodium	25.5	1.0	25	0.06416	102	85	115				
Uranium	0.515	0.00030	0.5		103	85	115				
Vanadium	0.460	0.010	0.5	0.0001543	92	85	115				
Zinc	0.506	0.010	0.5	0.005198	100	85	115				

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 134** SampType: **Sample Matrix Spike** Lab ID: **H14030374-001CMS3** Method: **E200.8**

Analysis Date: **03/28/14 20:06** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.49	0.030	2.5	0.0697	97	70	130				
Antimony	0.478	0.0010	0.5	0.0003264	96	70	130				
Arsenic	0.522	0.0010	0.5	0.005458	103	70	130				
Barium	0.488	0.050	0.5	0.046	88	70	130				
Beryllium	0.244	0.0010	0.25		97	70	130				
Boron	0.564	0.050	0.5	0.05704	101	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 134** SampType: **Sample Matrix Spike** Lab ID: **H14030374-001CMS3** Method: **E200.8**

Analysis Date: **03/28/14 20:06** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.230	0.0010	0.25	0.0001492	92	70	130				
Calcium	73.1	1.0	25	47.93	101	70	130				
Chromium	0.477	0.0050	0.5	0.0003592	95	70	130				
Cobalt	0.482	0.0050	0.5	0.0004482	96	70	130				
Copper	0.467	0.0050	0.5	0.007774	92	70	130				
Iron	2.90	0.020	2.5	0.3677	101	70	130				
Lead	0.467	0.0010	0.5	0.001417	93	70	130				
Magnesium	39.7	1.0	25	14.01	103	70	130				
Manganese	2.68	0.0010	2.5	0.1722	100	70	130				
Molybdenum	0.497	0.0010	0.5	0.006218	98	70	130				
Nickel	0.500	0.0050	0.5	0.00063	100	70	130				
Potassium	30.0	1.0	25	4.497	102	70	130				
Selenium	0.521	0.0010	0.5	0.0002797	104	70	130				
Silver	0.0489	0.0010	0.05	0.0001461	97	70	130				
Sodium	47.8	1.0	25	22.23	102	70	130				
Uranium	0.531	0.00030	0.5	0.006785	105	70	130				
Vanadium	0.479	0.010	0.5	0.002829	95	70	130				
Zinc	0.525	0.010	0.5	0.03183	99	70	130				

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 135** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-001CMSD3** Method: **E200.8**

Analysis Date: **03/28/14 20:10** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.46	0.030	2.5	0.0697	96	70	130	2.494	1.3	20	
Antimony	0.485	0.0010	0.5	0.0003264	97	70	130	0.478	1.5	20	
Arsenic	0.515	0.0010	0.5	0.005458	102	70	130	0.522	1.3	20	
Barium	0.486	0.050	0.5	0.046	88	70	130	0.488	0.3	20	
Beryllium	0.241	0.0010	0.25		96	70	130	0.2435	1.2	20	
Boron	0.576	0.050	0.5	0.05704	104	70	130	0.5636	2.2	20	
Cadmium	0.225	0.0010	0.25	0.0001492	90	70	130	0.2304	2.3	20	
Calcium	73.3	1.0	25	47.93	102	70	130	73.14	0.2	20	
Chromium	0.475	0.0050	0.5	0.0003592	95	70	130	0.4772	0.5	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 135** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-001CMSD3** Method: **E200.8**

Analysis Date: **03/28/14 20:10** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.479	0.0050	0.5	0.0004482	96	70	130	0.4816	0.6	20	
Copper	0.467	0.0050	0.5	0.007774	92	70	130	0.4671	0.0	20	
Iron	2.88	0.020	2.5	0.3677	101	70	130	2.895	0.3	20	
Lead	0.468	0.0010	0.5	0.001417	93	70	130	0.4673	0.0	20	
Magnesium	39.0	1.0	25	14.01	100	70	130	39.74	1.8	20	
Manganese	2.65	0.0010	2.5	0.1722	99	70	130	2.684	1.4	20	
Molybdenum	0.504	0.0010	0.5	0.006218	100	70	130	0.4969	1.4	20	
Nickel	0.499	0.0050	0.5	0.00063	100	70	130	0.4995	0.1	20	
Potassium	30.2	1.0	25	4.497	103	70	130	30.05	0.6	20	
Selenium	0.517	0.0010	0.5	0.0002797	103	70	130	0.5215	0.9	20	
Silver	0.0488	0.0010	0.05	0.0001461	97	70	130	0.04886	0.0	20	
Sodium	47.4	1.0	25	22.23	101	70	130	47.78	0.7	20	
Uranium	0.529	0.00030	0.5	0.006785	104	70	130	0.5306	0.3	20	
Vanadium	0.479	0.010	0.5	0.002829	95	70	130	0.4788	0.1	20	
Zinc	0.524	0.010	0.5	0.03183	99	70	130	0.5254	0.2	20	

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 165** SampType: **Sample Matrix Spike** Lab ID: **H14030374-011CMS3** Method: **E200.8**

Analysis Date: **03/28/14 22:21** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.73	0.030	2.5	0.2175	100	70	130				
Antimony	0.480	0.0010	0.5	0.0003496	96	70	130				
Arsenic	0.521	0.0010	0.5	0.008157	103	70	130				
Barium	0.491	0.050	0.5	0.04289	90	70	130				
Beryllium	0.247	0.0010	0.25		99	70	130				
Boron	0.579	0.050	0.5	0.06434	103	70	130				
Cadmium	0.231	0.0010	0.25	0.0002955	92	70	130				
Calcium	75.6	1.0	25	51.68	96	70	130				
Chromium	0.474	0.0050	0.5	0.0003653	95	70	130				
Cobalt	0.485	0.0050	0.5	0.000298	97	70	130				
Copper	0.482	0.0050	0.5	0.01904	93	70	130				
Iron	2.97	0.020	2.5	0.4215	102	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 165** SampType: **Sample Matrix Spike** Lab ID: **H14030374-011CMS3** Method: **E200.8**

Analysis Date: **03/28/14 22:21** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.470	0.0010	0.5	0.002146	94	70	130				
Magnesium	37.8	1.0	25	12.72	100	70	130				
Manganese	2.77	0.0010	2.5	0.247	101	70	130				
Molybdenum	0.498	0.0010	0.5	0.005131	99	70	130				
Nickel	0.500	0.0050	0.5	0.000857	100	70	130				
Potassium	31.6	1.0	25	6.386	101	70	130				
Selenium	0.521	0.0010	0.5	0.0002908	104	70	130				
Silver	0.0488	0.0010	0.05		98	70	130				
Sodium	55.0	1.0	25	30.57	98	70	130				
Uranium	0.539	0.00030	0.5	0.006505	107	70	130				
Vanadium	0.478	0.010	0.5	0.003094	95	70	130				
Zinc	0.558	0.010	0.5	0.06593	98	70	130				

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 166** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-011CMSD3** Method: **E200.8**

Analysis Date: **03/28/14 22:25** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.71	0.030	2.5	0.2175	100	70	130	2.728	0.6	20	
Antimony	0.482	0.0010	0.5	0.0003496	96	70	130	0.4798	0.4	20	
Arsenic	0.525	0.0010	0.5	0.008157	103	70	130	0.5215	0.7	20	
Barium	0.489	0.050	0.5	0.04289	89	70	130	0.4909	0.3	20	
Beryllium	0.244	0.0010	0.25		98	70	130	0.2466	0.9	20	
Boron	0.576	0.050	0.5	0.06434	102	70	130	0.5787	0.4	20	
Cadmium	0.230	0.0010	0.25	0.0002955	92	70	130	0.2314	0.5	20	
Calcium	76.8	1.0	25	51.68	101	70	130	75.63	1.5	20	
Chromium	0.484	0.0050	0.5	0.0003653	97	70	130	0.4745	2.0	20	
Cobalt	0.483	0.0050	0.5	0.000298	97	70	130	0.4855	0.5	20	
Copper	0.485	0.0050	0.5	0.01904	93	70	130	0.4822	0.5	20	
Iron	2.94	0.020	2.5	0.4215	101	70	130	2.966	0.8	20	
Lead	0.470	0.0010	0.5	0.002146	94	70	130	0.4704	0.0	20	
Magnesium	38.6	1.0	25	12.72	103	70	130	37.8	2.1	20	
Manganese	2.78	0.0010	2.5	0.247	101	70	130	2.772	0.2	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 166** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-011CMSD3** Method: **E200.8**

Analysis Date: **03/28/14 22:25** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.500	0.0010	0.5	0.005131	99	70	130	0.4979	0.5	20	
Nickel	0.505	0.0050	0.5	0.000857	101	70	130	0.4995	1.0	20	
Potassium	31.9	1.0	25	6.386	102	70	130	31.55	1.2	20	
Selenium	0.513	0.0010	0.5	0.0002908	103	70	130	0.5206	1.5	20	
Silver	0.0486	0.0010	0.05		97	70	130	0.04876	0.3	20	
Sodium	55.8	1.0	25	30.57	101	70	130	55.03	1.5	20	
Uranium	0.537	0.00030	0.5	0.006505	106	70	130	0.5391	0.4	20	
Vanadium	0.486	0.010	0.5	0.003094	97	70	130	0.4783	1.5	20	
Zinc	0.562	0.010	0.5	0.06593	99	70	130	0.558	0.8	20	

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140401B: 53** SampType: **Method Blank** Lab ID: **MB-23989** Method: **E200.8**

Analysis Date: **04/01/14 19:51** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.003	0.0006									
Antimony	0.0001	3E-05									
Arsenic	0.00010	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Boron	0.002	0.001									
Cadmium	ND	3E-05									
Calcium	ND	0.02									
Chromium	9E-05	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.003	0.002									
Lead	3E-05	3E-05									
Magnesium	0.004	0.002									
Manganese	0.0003	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	0.09	0.02									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23989

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140401B: 53** SampType: **Method Blank** Lab ID: **MB-23989** Method: **E200.8**

Analysis Date: **04/01/14 19:51** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.0002									
Silver	ND	7E-05									
Sodium	0.1	0.03									
Uranium	ND	3E-05									
Vanadium	0.0001	7E-05									
Zinc	0.006	0.001									

Associated samples: **H14030374-001C; H14030374-002C; H14030374-003C; H14030374-004C; H14030374-005C; H14030374-006C; H14030374-007C; H14030374-008C; H14030374-009C; H14030374-010C; H14030374-011C; H14030374-012C; H14030374-013C; H14030374-014C; H14030374-015C; H14030374-016C; H14030374-017C; H14030374-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23991

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140328B: 63** SampType: **Method Blank** Lab ID: **MB-23991** Method: **E245.1**
Analysis Date: **03/28/14 14:00** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	3E-06									

Associated samples: **H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 64** SampType: **Laboratory Control Sample** Lab ID: **LCS-23991** Method: **E245.1**
Analysis Date: **03/28/14 14:04** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015		**102**	90	110				

Associated samples: **H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 86** SampType: **Sample Matrix Spike** Lab ID: **H14030374-008BMS** Method: **E245.1**
Analysis Date: **03/28/14 15:37** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015		**111**	70	130				

Associated samples: **H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Run ID :Run Order: **HGCV202-H_140328B: 87** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-008BMSD** Method: **E245.1**
Analysis Date: **03/28/14 15:42** Units: **mg/L** **Prep Info:** Prep Date: **3/27/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015		**112**	70	130	0.0001668	**0.8**	20	

Associated samples: **H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 23999

Date: *23-Apr-14*

Run ID :Run Order: **FIA202-HE_140328A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-23999** Method: **E365.1**
Analysis Date: **03/28/14 10:06** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.206	0.010	0.2		103	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D**

Run ID :Run Order: **FIA202-HE_140328A: 12** SampType: **Method Blank** Lab ID: **MB-23999** Method: **E365.1**
Analysis Date: **03/28/14 10:07** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D**

Run ID :Run Order: **FIA202-HE_140328A: 16** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001DMS** Method: **E365.1**
Analysis Date: **03/28/14 10:11** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.195	0.010	0.1	0.111	84	90	110				S

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D**

Run ID :Run Order: **FIA202-HE_140328A: 17** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001DMSD** Method: **E365.1**
Analysis Date: **03/28/14 10:12** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.191	0.010	0.1	0.111	80	90	110	0.1948	2.0	20	S

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24001

Date: *23-Apr-14*

Run ID :Run Order: **FIA202-HE_140328A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-24001** Method: **E365.1**
Analysis Date: **03/28/14 10:37** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.198	0.010	0.2		99	90	110				

Associated samples: **H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA202-HE_140328A: 42** SampType: **Method Blank** Lab ID: **MB-24001** Method: **E365.1**
Analysis Date: **03/28/14 10:38** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA202-HE_140328A: 44** SampType: **Sample Matrix Spike** Lab ID: **H14030374-016DMS** Method: **E365.1**
Analysis Date: **03/28/14 10:40** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.302	0.010	0.1	0.2212	81	90	110				S

Associated samples: **H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA202-HE_140328A: 45** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-016DMSD** Method: **E365.1**
Analysis Date: **03/28/14 10:41** Units: **mg/L** **Prep Info:** Prep Date: **3/28/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.307	0.010	0.1	0.2212	86	90	110	0.3019	1.7	20	S

Associated samples: **H14030374-016D; H14030374-017D; H14030374-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24011

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140401A: 10** SampType: **Method Blank** Lab ID: **MB-24011** Method: **E245.1**
Analysis Date: **04/01/14 11:45** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	3E-06									

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Run ID :Run Order: **HGCV202-H_140401A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24011** Method: **E245.1**
Analysis Date: **04/01/14 11:50** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		94	90	110				

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Run ID :Run Order: **HGCV202-H_140401A: 20** SampType: **Sample Matrix Spike** Lab ID: **H14030374-011BMS** Method: **E245.1**
Analysis Date: **04/01/14 12:37** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		90	70	130				

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Run ID :Run Order: **HGCV202-H_140401A: 21** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-011BMSD** Method: **E245.1**
Analysis Date: **04/01/14 12:41** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		95	70	130	0.0001352	5.5	20	

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Run ID :Run Order: **HGCV202-H_140401A: 36** SampType: **Sample Matrix Spike** Lab ID: **H14030374-017BMS** Method: **E245.1**
Analysis Date: **04/01/14 13:45** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		94	70	130				

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24011

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140401A: 37** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-017BMSD** Method: **E245.1**

Analysis Date: **04/01/14 13:49** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015		**97**	70	130	0.0001417	**2.4**	20	

Associated samples: **H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24012

Date: *23-Apr-14*

Run ID :Run Order: **HGCV202-H_140401A: 41** SampType: **Method Blank** Lab ID: **MB-24012** Method: **E245.1**
Analysis Date: **04/01/14 14:06** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	3E-06									

Associated samples: **H14030374-018B; H14030374-018C**

Run ID :Run Order: **HGCV202-H_140401A: 42** SampType: **Laboratory Control Sample** Lab ID: **LCS-24012** Method: **E245.1**
Analysis Date: **04/01/14 14:10** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		93	90	110				

Associated samples: **H14030374-018B; H14030374-018C**

Run ID :Run Order: **HGCV202-H_140401A: 47** SampType: **Sample Matrix Spike** Lab ID: **H14030389-002BMS** Method: **E245.1**
Analysis Date: **04/01/14 14:31** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		96	70	130				

Associated samples: **H14030374-018B; H14030374-018C**

Run ID :Run Order: **HGCV202-H_140401A: 48** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030389-002BMSD** Method: **E245.1**
Analysis Date: **04/01/14 14:35** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		96	70	130	0.0001445	0.7	20	

Associated samples: **H14030374-018B; H14030374-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24021

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140331C: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24021** Method: **A4500 N-C**
Analysis Date: **03/31/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	18.1	0.30	18.7	0.03891	96	90	110				

Associated samples: **H14030374-008A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **FIA203-HE_140331C: 12** SampType: **Method Blank** Lab ID: **MB-24021** Method: **A4500 N-C**
Analysis Date: **03/31/14 14:59** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.04	0.02									

Associated samples: **H14030374-008A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **FIA203-HE_140331C: 38** SampType: **Sample Matrix Spike** Lab ID: **H14030374-012Ams** Method: **A4500 N-C**
Analysis Date: **03/31/14 15:30** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.03	0.10	1	0.03678	99	90	110				

Associated samples: **H14030374-008A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **FIA203-HE_140331C: 39** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-012Amsd** Method: **A4500 N-C**
Analysis Date: **03/31/14 15:31** Units: **mg/L** **Prep Info:** Prep Date: **3/31/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.04	0.10	1	0.03678	101	90	110	1.028	1.4	20	

Associated samples: **H14030374-008A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24037

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140401B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24037** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:00** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	18.0	0.30	18.7		96	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-009A; H14030374-010A; H14030374-011A**

Run ID :Run Order: **FIA203-HE_140401B: 12** SampType: **Method Blank** Lab ID: **MB-24037** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:01** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-009A; H14030374-010A; H14030374-011A**

Run ID :Run Order: **FIA203-HE_140401B: 18** SampType: **Sample Matrix Spike** Lab ID: **H14030374-005AMS** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:08** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.02	0.10	1	0.0263	99	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-009A; H14030374-010A; H14030374-011A**

Run ID :Run Order: **FIA203-HE_140401B: 19** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-005AMSD** Method: **A4500 N-C**
Analysis Date: **04/01/14 14:09** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.00	0.10	1	0.0263	98	90	110	1.018	1.4	20	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-009A; H14030374-010A; H14030374-011A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24038

Date: *23-Apr-14*

Run ID :Run Order: **FIA202-HE_140402B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24038** Method: **E365.1**
Analysis Date: **04/02/14 09:23** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.384	0.010	0.4		96	90	110				

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Run ID :Run Order: **FIA202-HE_140402B: 12** SampType: **Method Blank** Lab ID: **MB-24038** Method: **E365.1**
Analysis Date: **04/02/14 09:24** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Run ID :Run Order: **FIA202-HE_140402B: 15** SampType: **Sample Matrix Spike** Lab ID: **H14030374-007DMS** Method: **E365.1**
Analysis Date: **04/02/14 09:27** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.468	0.010	0.2	0.3416	63	90	110				S

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Run ID :Run Order: **FIA202-HE_140402B: 16** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-007DMSD** Method: **E365.1**
Analysis Date: **04/02/14 09:28** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.483	0.010	0.2	0.3416	71	90	110	0.4676	3.2	20	S

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Run ID :Run Order: **FIA202-HE_140402B: 31** SampType: **Sample Matrix Spike** Lab ID: **H14030410-001AMS** Method: **E365.1**
Analysis Date: **04/02/14 09:43** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.242	0.010	0.2	0.08691	77	90	110				S

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24038

Date: *23-Apr-14*

Run ID :Run Order: **FIA202-HE_140402B: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030410-001AMSD** Method: **E365.1**

Analysis Date: **04/02/14 09:44** Units: **mg/L** **Prep Info:** Prep Date: **4/1/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.254	0.010	0.2	0.08691	83	90	110	0.2419	4.8	20	S

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 58** SampType: **Method Blank** Lab ID: **MB-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.6	0.3									
Arsenic	ND	0.4									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	ND	0.2									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Lead	ND	0.6									
Manganese	0.08	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 59** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:18** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	242	5.0	250	0.558	97	80	120				
Arsenic	45.3	1.0	50		91	80	120				
Barium	49.0	1.0	50		98	80	120				
Beryllium	24.0	1.0	25		96	80	120				
Boron	44.2	1.0	50		88	80	120				
Chromium	47.8	1.0	50		96	80	120				
Cobalt	44.6	1.0	50		89	80	120				
Copper	47.7	1.0	50		95	80	120				
Iron	235	5.0	250	11.57	90	80	120				
Lead	44.2	1.0	50		88	80	120				
Manganese	233	1.0	250	0.078	93	80	120				
Nickel	46.3	1.0	50		93	80	120				
Vanadium	47.3	1.0	50		95	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 59** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:18** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 60** SampType: **Laboratory Control Sample** Lab ID: **LCS-24077** Method: **SW6010B**

Analysis Date: **04/08/14 16:21** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12100	5.0	14640	0.558	82	50.7	131.3				
Arsenic	250	1.8	341.6		73	72.3	106.4				
Barium	532	1.0	611.6		87	80.6	112.2				
Beryllium	42.0	1.0	50.8		83	76.3	108.6				
Boron	65.6	1.0	92.83		71	59.4	101.9				
Chromium	64.5	1.0	75.7		85	72.8	109.1				
Cobalt	43.5	1.0	57.17		76	73.3	103.7				
Copper	240	1.1	278.9		86	77.5	109.6				
Iron	17600	5.0	22910	11.57	77	39.6	138.3				
Lead	153	3.2	186.3		82	75.9	108.6				
Manganese	354	1.0	367.5	0.078	96	80.8	115.7				
Nickel	48.4	1.0	60.76		80	72.3	103.4				
Vanadium	57.7	1.0	72.71		79	66.6	107.3				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 83** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**

Analysis Date: **04/08/14 17:46** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2720	16				0	0	2661	2.4	10	
Arsenic	14.6	8.7				0	0	15.64		10	N
Barium	51.8	1.0				0	0	50.55	2.4	10	
Beryllium	ND	1.0				0	0	0.1667		10	
Boron	ND	2.5				0	0			10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 83** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**

Analysis Date: **04/08/14 17:46** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.9	1.5				0	0	6.925		10	N
Cobalt	2.75	2.7				0	0	2.645		10	N
Copper	72.1	5.3				0	0	74.92	3.8	10	
Iron	7240	14				0	0	7071	2.4	10	
Lead	29.5	15				0	0	31.83		10	N
Manganese	347	1.0				0	0	337.3	2.7	10	
Nickel	2.87	1.7				0	0	3.511		10	N
Vanadium	13.3	3.6				0	0	15.74		10	N

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 84** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-063APDS** Method: **SW6010B**

Analysis Date: **04/08/14 17:49** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3820	5.0	1240	2661	93	75	125				
Arsenic	244	1.8	248.1	15.64	92	75	125				
Barium	282	1.0	248.1	50.55	93	75	125				
Beryllium	115	1.0	124	0.1667	92	75	125				
Boron	222	1.0	248.1		90	75	125				
Chromium	244	1.0	248.1	6.925	96	75	125				
Cobalt	227	1.0	248.1	2.645	90	75	125				
Copper	300	1.1	248.1	74.92	91	75	125				
Iron	8010	5.0	1240	7071		75	125				A
Lead	254	3.2	248.1	31.83	89	75	125				
Manganese	1460	1.0	1240	337.3	90	75	125				
Nickel	236	1.0	248.1	3.511	94	75	125				
Vanadium	243	1.0	248.1	15.74	92	75	125				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 85** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6010B**

Analysis Date: **04/08/14 17:53** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3930	5.0	243.7	2661		75	125				A
Arsenic	57.6	1.8	48.73	15.64	86	75	125				
Barium	96.2	1.0	48.73	50.55	94	75	125				
Beryllium	24.0	1.0	24.37	0.1667	98	75	125				
Boron	46.0	1.0	48.73		94	75	125				
Chromium	55.4	1.0	48.73	6.925	100	75	125				
Cobalt	47.9	1.0	48.73	2.645	93	75	125				
Copper	82.6	1.1	48.73	74.92	16	75	125				S
Iron	6720	5.0	243.7	7071		75	125				A
Lead	61.9	3.1	48.73	31.83	62	75	125				S
Manganese	500	1.0	243.7	337.3	67	75	125				S
Nickel	51.2	1.0	48.73	3.511	98	75	125				
Vanadium	64.3	1.0	48.73	15.74	100	75	125				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 86** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/08/14 17:57** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3660	5.0	240.8	2661		75	125	3928	7.1	20	A
Arsenic	56.3	1.7	48.17	15.64	84	75	125	57.62	2.3	20	
Barium	90.7	1.0	48.17	50.55	83	75	125	96.2	5.9	20	
Beryllium	23.8	1.0	24.08	0.1667	98	75	125	24	1.0	20	
Boron	45.0	1.0	48.17		93	75	125	45.96	2.2	20	
Chromium	54.6	1.0	48.17	6.925	99	75	125	55.42	1.4	20	
Cobalt	46.8	1.0	48.17	2.645	92	75	125	47.92	2.3	20	
Copper	88.8	1.1	48.17	74.92	29	75	125	82.63	7.2	20	S
Iron	6540	5.0	240.8	7071		75	125	6722	2.8	20	A
Lead	61.1	3.1	48.17	31.83	61	75	125	61.94	1.4	20	S
Manganese	499	1.0	240.8	337.3	67	75	125	500	0.3	20	S
Nickel	49.7	1.0	48.17	3.511	96	75	125	51.17	2.9	20	
Vanadium	65.0	1.0	48.17	15.74	102	75	125	64.27	1.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 86** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/08/14 17:57** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 111** SampType: **Method Blank** Lab ID: **MB-24077** Method: **SW6020**

Analysis Date: **04/09/14 00:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.3	0.3									
Uranium	ND	0.2									

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Run ID :Run Order: **ICPMS204-B_140408B: 112** SampType: **Laboratory Control Sample** Lab ID: **LCS-24077** Method: **SW6020**

Analysis Date: **04/09/14 00:41** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	43.5	1.0	125.5		35	2.2	92.9				
Arsenic	304	1.0	341.6		89	72.3	106.4				
Cadmium	124	1.0	136.5		91	73	105.1				
Lead	187	1.0	186.3		100	75.9	108.6				
Molybdenum	150	1.0	171.3		87	68.6	105.8				
Selenium	191	1.0	195.2		98	72.5	112.2				
Silver	61.9	1.0	68.73	0.2865	90	67.8	112.8				
Uranium	115	1.0	99.6		115	80	120				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Run ID :Run Order: **ICPMS204-B_140408B: 113** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6020**

Analysis Date: **04/09/14 00:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.6	1.0	50		99	80	120				
Arsenic	50.6	1.0	50		101	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 113** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24077** Method: **SW6020**

Analysis Date: **04/09/14 00:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	25.7	1.0	25		103	80	120				
Lead	50.6	1.0	50		101	80	120				
Molybdenum	50.3	1.0	50		101	80	120				
Selenium	51.4	1.0	50		103	80	120				
Silver	24.9	1.0	25	0.2865	98	80	120				
Uranium	50.6	1.0	50		101	80	120				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Run ID :Run Order: **ICPMS204-B_140408B: 140** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6020**

Analysis Date: **04/09/14 02:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	39.2	1.0	48.73	0.1315	80	75	125				
Arsenic	61.0	1.0	48.73	14.85	95	75	125				
Cadmium	26.1	1.0	24.37	0.8374	104	75	125				
Lead	68.9	1.0	48.73	34.78	70	75	125				S
Molybdenum	49.3	1.0	48.73	0.7445	100	75	125				
Selenium	50.6	1.0	48.73		104	75	125				
Silver	24.5	1.0	24.37	0.8702	97	75	125				
Uranium	51.9	1.0	48.73	1.236	104	75	125				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Run ID :Run Order: **ICPMS204-B_140408B: 141** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6020**

Analysis Date: **04/09/14 02:50** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	38.9	1.0	48.17	0.1315	80	75	125	39.21	0.8	20	
Arsenic	60.5	1.0	48.17	14.85	95	75	125	61.01	0.8	20	
Cadmium	25.6	1.0	24.08	0.8374	103	75	125	26.12	2.1	20	
Lead	69.8	1.0	48.17	34.78	73	75	125	68.93	1.3	20	S

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24077

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 141** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6020**

Analysis Date: **04/09/14 02:50** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	48.8	1.0	48.17	0.7445	100	75	125	49.29	1.1	20	
Selenium	50.9	1.0	48.17		106	75	125	50.56	0.7	20	
Silver	24.5	1.0	24.08	0.8702	98	75	125	24.54	0.0	20	
Uranium	53.0	1.0	48.17	1.236	107	75	125	51.95	2.0	20	

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Run ID :Run Order: **ICPMS204-B_140417A: 68** SampType: **Method Blank** Lab ID: **MB-24077** Method: **SW6020**

Analysis Date: **04/17/14 14:37** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 19** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:50** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.3	0.3									
Arsenic	ND	0.4									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	0.07	0.06									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	2	0.6									
Lead	ND	0.6									
Manganese	0.03	0.02									
Nickel	0.09	0.07									
Vanadium	ND	0.1									
Zinc	0.9	0.09									

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140408C: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:54** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	243	5.0	250	0.3175	97	80	120				
Arsenic	47.6	1.0	50		95	80	120				
Beryllium	24.7	1.0	25		99	80	120				
Boron	47.2	1.0	50		94	80	120				
Chromium	47.6	1.0	50	0.0685	95	80	120				
Cobalt	46.9	1.0	50		94	80	120				
Copper	48.7	1.0	50		97	80	120				
Iron	253	5.0	250	1.657	101	80	120				
Lead	46.4	1.0	50		93	80	120				
Manganese	243	1.0	250	0.0345	97	80	120				
Nickel	46.5	1.0	50	0.086	93	80	120				
Vanadium	49.4	1.0	50		99	80	120				
Zinc	46.6	1.0	50	0.8805	92	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:54** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140408C: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-24078** Method: **SW6010B**

Analysis Date: **04/08/14 13:58** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10800	5.0	14200	0.3175	76	50.7	131.3				
Arsenic	244	1.7	331.4		73	72.3	106.4				
Beryllium	37.5	1.0	49.28		76	76.3	108.6				
Boron	64.7	1.0	90.05		72	59.4	101.9				
Chromium	60.0	1.0	73.43	0.0685	82	72.8	109.1				
Cobalt	42.4	1.0	55.46		76	73.3	103.7				
Copper	211	1.1	270.5		78	77.5	109.6				
Iron	16500	5.0	22220	1.657	74	39.6	138.3				
Lead	150	3.1	180.7		83	75.9	108.6				
Manganese	320	1.0	356.5	0.0345	90	80.8	115.7				
Nickel	45.7	1.0	58.94	0.086	77	72.3	103.4				
Vanadium	55.1	1.0	70.53		78	66.6	107.3				
Zinc	161	1.0	205.8	0.8805	78	74.2	109.9				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140408C: 45** SampType: **Serial Dilution** Lab ID: **H14030374-065ADIL** Method: **SW6010B**

Analysis Date: **04/08/14 15:26** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3910	15				0	0	3932	0.5	10	
Arsenic	18.3	8.3				0	0	11.59		10	N
Beryllium	ND	1.0				0	0	0.2065		10	
Boron	ND	2.4				0	0	0.8641		10	
Chromium	8.53	1.4				0	0	7.429		10	N

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 45** SampType: **Serial Dilution** Lab ID: **H14030374-065ADIL** Method: **SW6010B**

Analysis Date: **04/08/14 15:26** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	ND	2.6				0	0	0.7032		10	
Copper	123	5.1				0	0	122.1	0.8	10	
Iron	7080	14				0	0	7070	0.1	10	
Lead	38.9	15				0	0	33.47		10	N
Manganese	203	1.0				0	0	203.6	0.2	10	
Nickel	4.63	1.6				0	0	3.704		10	N
Vanadium	22.9	3.4				0	0	18.58		10	N
Zinc	160	2.1				0	0	143.1	11	10	R

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140408C: 46** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-065APDS** Method: **SW6010B**

Analysis Date: **04/08/14 15:29** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5010	5.0	1187	3932	90	75	125				
Arsenic	218	1.7	237.3	11.59	87	75	125				
Beryllium	105	1.0	118.7	0.2065	89	75	125				
Boron	207	1.0	237.3	0.8641	87	75	125				
Chromium	211	1.0	237.3	7.429	86	75	125				
Cobalt	202	1.0	237.3	0.7032	85	75	125				
Copper	335	1.0	237.3	122.1	90	75	125				
Iron	7980	5.0	1187	7070		75	125				A
Lead	231	3.0	237.3	33.47	83	75	125				
Manganese	1240	1.0	1187	203.6	88	75	125				
Nickel	202	1.0	237.3	3.704	84	75	125				
Vanadium	230	1.0	237.3	18.58	89	75	125				
Zinc	349	1.0	237.3	143.1	87	75	125				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 56** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6010B**

Analysis Date: **04/08/14 16:06** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5410	5.0	231.3	3932		75	125				A
Arsenic	60.2	1.7	46.25	11.59	105	75	125				
Beryllium	23.4	1.0	23.13	0.2065	100	75	125				
Boron	43.7	1.0	46.25	0.8641	93	75	125				
Chromium	55.3	1.0	46.25	7.429	103	75	125				
Cobalt	44.8	1.0	46.25	0.7032	95	75	125				
Copper	170	1.0	46.25	122.1	103	75	125				
Iron	8440	5.0	231.3	7070		75	125				A
Lead	85.6	2.9	46.25	33.47	113	75	125				
Manganese	422	1.0	231.3	203.6	94	75	125				
Nickel	48.2	1.0	46.25	3.704	96	75	125				
Vanadium	67.5	1.0	46.25	18.58	106	75	125				
Zinc	221	1.0	46.25	143.1	169	75	125				S

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140408C: 57** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6010B**

Analysis Date: **04/08/14 16:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5220	5.0	230.2	3932		75	125	5413	3.6	20	A
Arsenic	57.2	1.7	46.04	11.59	99	75	125	60.18	5.1	20	
Beryllium	22.7	1.0	23.02	0.2065	98	75	125	23.35	2.7	20	
Boron	40.6	1.0	46.04	0.8641	86	75	125	43.67	7.2	20	
Chromium	52.3	1.0	46.04	7.429	98	75	125	55.3	5.5	20	
Cobalt	42.7	1.0	46.04	0.7032	91	75	125	44.78	4.7	20	
Copper	153	1.0	46.04	122.1	67	75	125	169.8	10	20	S
Iron	7830	5.0	230.2	7070		75	125	8437	7.4	20	A
Lead	103	2.9	46.04	33.47	152	75	125	85.61	19	20	S
Manganese	466	1.0	230.2	203.6	114	75	125	421.9	10.0	20	
Nickel	46.1	1.0	46.04	3.704	92	75	125	48.17	4.4	20	
Vanadium	65.6	1.0	46.04	18.58	102	75	125	67.47	2.9	20	
Zinc	250	1.0	46.04	143.1	232	75	125	221.2	12	20	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 57** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6010B**

Analysis Date: **04/08/14 16:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140411A: 40** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6010B**

Analysis Date: **04/11/14 16:01** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.3	0.3									
Arsenic	ND	0.4									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	ND	0.06									
Cobalt	ND	0.1									
Copper	0.3	0.2									
Iron	2	0.6									
Lead	ND	0.6									
Manganese	ND	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.9	0.09									

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140411A: 42** SampType: **Serial Dilution** Lab ID: **H14030374-065ADIL** Method: **SW6010B**

Analysis Date: **04/11/14 16:09** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4240	15				0	0	4036	4.9	10	
Arsenic	14.0	8.3				0	0	14.73		10	N
Beryllium	ND	1.0				0	0	0.1438		10	
Boron	ND	2.4				0	0	0.7986		10	
Chromium	6.58	1.4				0	0	7.843		10	N

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 42** SampType: **Serial Dilution** Lab ID: **H14030374-065ADIL** Method: **SW6010B**

Analysis Date: **04/11/14 16:09** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	ND	2.6				0	0			10	
Copper	133	5.1				0	0	123.5	7.7	10	
Iron	7650	14				0	0	7213	5.8	10	
Lead	ND	15				0	0	32.59		10	
Manganese	219	1.0				0	0	207.6	5.4	10	
Nickel	3.07	1.6				0	0	3.642		10	N
Vanadium	21.2	3.4				0	0	18.4		10	N
Zinc	164	2.1				0	0	161.9	1.0	10	

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140411A: 43** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-065APDS** Method: **SW6010B**

Analysis Date: **04/11/14 16:12** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5350	5.0	1187	4036	110	75	125				
Arsenic	238	1.7	237.3	14.73	94	75	125				
Beryllium	114	1.0	118.7	0.1438	96	75	125				
Boron	221	1.0	237.3	0.7986	93	75	125				
Chromium	232	1.0	237.3	7.843	94	75	125				
Cobalt	218	1.0	237.3		92	75	125				
Copper	350	1.0	237.3	123.5	95	75	125				
Iron	8480	5.0	1187	7213		75	125				A
Lead	246	3.0	237.3	32.59	90	75	125				
Manganese	1320	1.0	1187	207.6	93	75	125				
Nickel	221	1.0	237.3	3.642	92	75	125				
Vanadium	242	1.0	237.3	18.4	94	75	125				
Zinc	382	1.0	237.3	161.9	93	75	125				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 44** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6010B**

Analysis Date: **04/11/14 16:16** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5270	5.0	231.3	4036		75	125				A
Arsenic	64.2	1.7	46.25	14.73	107	75	125				
Beryllium	23.2	1.0	23.13	0.1438	100	75	125				
Boron	46.9	1.0	46.25	0.7986	100	75	125				
Chromium	55.4	1.0	46.25	7.843	103	75	125				
Cobalt	45.2	1.0	46.25		98	75	125				
Copper	166	1.0	46.25	123.5	92	75	125				
Iron	8480	5.0	231.3	7213		75	125				A
Lead	90.6	2.9	46.25	32.59	125	75	125				
Manganese	422	1.0	231.3	207.6	93	75	125				
Nickel	49.2	1.0	46.25	3.642	99	75	125				
Vanadium	67.1	1.0	46.25	18.4	105	75	125				
Zinc	238	1.0	46.25	161.9	164	75	125				S

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICP2-HE_140411A: 47** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6010B**

Analysis Date: **04/11/14 16:27** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5310	5.0	230.2	4036		75	125	5272	0.8	20	A
Arsenic	59.6	1.7	46.04	14.73	97	75	125	64.18	7.4	20	
Beryllium	23.5	1.0	23.02	0.1438	102	75	125	23.25	1.2	20	
Boron	43.5	1.0	46.04	0.7986	93	75	125	46.94	7.6	20	
Chromium	51.7	1.0	46.04	7.843	95	75	125	55.44	6.9	20	
Cobalt	42.6	1.0	46.04		93	75	125	45.25	6.0	20	
Copper	155	1.0	46.04	123.5	68	75	125	166.2	7.0	20	S
Iron	8160	5.0	230.2	7213		75	125	8478	3.9	20	A
Lead	103	2.9	46.04	32.59	153	75	125	90.59	13	20	S
Manganese	482	1.0	230.2	207.6	119	75	125	422.5	13	20	
Nickel	46.2	1.0	46.04	3.642	92	75	125	49.24	6.3	20	
Vanadium	66.7	1.0	46.04	18.4	105	75	125	67.14	0.7	20	
Zinc	263	1.0	46.04	161.9	220	75	125	237.7	10	20	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 47** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6010B**

Analysis Date: **04/11/14 16:27** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 145** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6020**

Analysis Date: **04/09/14 03:08** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Barium	ND	0.4									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.4	0.3									
Uranium	ND	0.2									
Zinc	6	4									

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICPMS204-B_140408B: 146** SampType: **Laboratory Control Sample** Lab ID: **LCS-24078** Method: **SW6020**

Analysis Date: **04/09/14 03:12** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	41.3	1.0	121.7		34	2.2	92.9				
Arsenic	285	1.0	331.4		86	72.3	106.4				
Barium	555	1.0	593.2		94	80.6	112.2				
Cadmium	120	1.0	132.4		90	73	105.1				
Lead	176	1.0	180.7		98	75.9	108.6				
Molybdenum	142	1.0	166.2		85	68.6	105.8				
Selenium	183	1.0	189.4		97	72.5	112.2				
Silver	59.7	1.0	66.67	0.4242	89	67.8	112.8				
Uranium	107	1.0	96.62		111	80	120				
Zinc	199	3.4	205.8	5.705	94	74.2	109.9				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 147** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6020**

Analysis Date: **04/09/14 03:17** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.6	1.0	50		101	80	120				
Arsenic	50.0	1.0	50		100	80	120				
Barium	50.6	1.0	50		101	80	120				
Cadmium	26.2	1.0	25		105	80	120				
Lead	51.4	1.0	50		103	80	120				
Molybdenum	50.5	1.0	50		101	80	120				
Selenium	52.2	1.0	50		104	80	120				
Silver	25.4	1.0	25	0.4242	100	80	120				
Uranium	51.6	1.0	50		103	80	120				
Zinc	56.0	3.5	50	5.705	101	80	120				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICPMS204-B_140411A: 50** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24078** Method: **SW6020**

Analysis Date: **04/10/14 20:44** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.7	1.0	50		101	80	120				
Arsenic	51.8	1.0	50		104	80	120				
Barium	51.4	1.0	50		103	80	120				
Cadmium	26.7	1.0	25		107	80	120				
Lead	52.8	1.0	50		106	80	120				
Molybdenum	50.2	1.0	50		100	80	120				
Selenium	55.0	1.0	50		110	80	120				
Silver	23.8	1.0	25		95	80	120				
Uranium	54.9	1.0	50		110	80	120				
Zinc	56.4	3.5	50	6.005	101	80	120				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411A: 78** SampType: **Sample Matrix Spike** Lab ID: **H14030374-065AMS** Method: **SW6020**

Analysis Date: **04/10/14 22:47** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	31.8	1.0	46.25	0.2	68	75	125				S
Arsenic	64.6	1.0	46.25	14.18	109	75	125				
Barium	144	1.0	46.25	108.6	76	75	125				
Cadmium	25.5	1.0	23.13	0.779	107	75	125				
Lead	101	1.0	46.25	41.31	129	75	125				S
Molybdenum	48.4	1.0	46.25	0.6316	103	75	125				
Selenium	49.6	1.0	46.25		107	75	125				
Silver	23.5	1.0	23.13	1.029	97	75	125				
Uranium	54.7	1.0	46.25	2.084	114	75	125				
Zinc	248	3.2	46.25	173.7	160	75	125				S

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICPMS204-B_140411A: 79** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-065AMSD** Method: **SW6020**

Analysis Date: **04/10/14 22:51** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	30.6	1.0	46.04	0.2	66	75	125	31.85	3.9	20	S
Arsenic	62.7	1.0	46.04	14.18	105	75	125	64.57	2.9	20	
Barium	159	1.0	46.04	108.6	109	75	125	143.7	9.8	20	
Cadmium	25.6	1.0	23.02	0.779	108	75	125	25.46	0.4	20	
Lead	124	1.0	46.04	41.31	179	75	125	101.1	20	20	SR
Molybdenum	48.1	1.0	46.04	0.6316	103	75	125	48.43	0.7	20	
Selenium	49.0	1.0	46.04		107	75	125	49.63	1.2	20	
Silver	24.6	1.0	23.02	1.029	102	75	125	23.47	4.5	20	
Uranium	54.4	1.0	46.04	2.084	114	75	125	54.69	0.5	20	
Zinc	288	3.2	46.04	173.7	248	75	125	247.9	15	20	S

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411A: 207** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6020**

Analysis Date: **04/11/14 10:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Barium	ND	0.4									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Zinc	6	4									

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICPMS204-B_140411A: 208** SampType: **Laboratory Control Sample** Lab ID: **LCS-24078** Method: **SW6020**

Analysis Date: **04/11/14 10:19** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	41.5	1.0	121.7		**34**	2.2	92.9				
Arsenic	285	1.0	331.4		**86**	72.3	106.4				
Barium	578	1.0	593.2		**97**	80.6	112.2				
Cadmium	127	1.0	132.4		**96**	73	105.1				
Lead	177	1.0	180.7		**98**	75.9	108.6				
Molybdenum	144	1.0	166.2		**87**	68.6	105.8				
Selenium	182	1.0	189.4		**96**	72.5	112.2				
Silver	62.2	1.0	66.67		**93**	67.8	112.8				
Uranium	112	1.0	96.62		**116**	80	120				
Zinc	199	3.4	205.8	6.005	**94**	74.2	109.9				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24078

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411C: 50** SampType: **Method Blank** Lab ID: **MB-24078** Method: **SW6020**

Analysis Date: **04/11/14 20:37** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4	0.1									
Arsenic	ND	0.3									
Barium	ND	0.4									
Cadmium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.3	0.3									
Uranium	ND	0.2									
Zinc	5	4									

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 17** SampType: **Method Blank** Lab ID: **MB-24079** Method: **SW6010B**

Analysis Date: **04/07/14 11:41** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Arsenic	0.5	0.4									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	ND	0.1									
Cadmium	0.01	0.01									
Chromium	ND	0.06									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	4	0.6									
Lead	ND	0.6									
Manganese	0.05	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.3	0.09									

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICP2-HE_140407B: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6010B**

Analysis Date: **04/07/14 11:44** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	267	5.0	250		107	80	120				
Arsenic	50.2	1.0	50	0.5175	99	80	120				
Barium	53.3	1.0	50		107	80	120				
Beryllium	25.7	1.0	25		103	80	120				
Boron	48.9	1.0	50		98	80	120				
Cadmium	24.6	1.0	25	0.0145	98	80	120				
Chromium	49.7	1.0	50		99	80	120				
Cobalt	49.1	1.0	50		98	80	120				
Copper	52.1	1.0	50		104	80	120				
Iron	251	5.0	250	3.546	99	80	120				
Lead	49.8	1.0	50		100	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6010B**

Analysis Date: **04/07/14 11:44** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	252	1.0	250	0.048	101	80	120				
Nickel	48.2	1.0	50		96	80	120				
Vanadium	50.6	1.0	50		101	80	120				
Zinc	50.5	1.0	50	0.2685	100	80	120				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICP2-HE_140407B: 19** SampType: **Laboratory Control Sample** Lab ID: **LCS-24079** Method: **SW6010B**

Analysis Date: **04/07/14 11:48** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13000	5.0	13870		94	50.7	131.3				
Arsenic	267	1.7	323.6	0.5175	82	72.3	106.4				
Barium	540	1.0	579.2		93	80.6	112.2				
Beryllium	42.1	1.0	48.11		88	76.3	108.6				
Boron	69.1	1.0	87.92		79	59.4	101.9				
Cadmium	113	1.0	129.2	0.0145	88	73	105.1				
Chromium	64.2	1.0	71.7		90	72.8	109.1				
Cobalt	45.3	1.0	54.15		84	73.3	103.7				
Copper	240	1.0	264.2		91	77.5	109.6				
Iron	18400	5.0	21700	3.546	85	39.6	138.3				
Lead	166	3.0	176.4		94	75.9	108.6				
Manganese	356	1.0	348.1	0.048	102	80.8	115.7				
Nickel	49.4	1.0	57.55		86	72.3	103.4				
Vanadium	59.0	1.0	68.87		86	66.6	107.3				
Zinc	181	1.0	200.9	0.2685	90	74.2	109.9				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 30** SampType: **Serial Dilution** Lab ID: **H14030374-031ADIL** Method: **SW6010B**

Analysis Date: **04/07/14 12:28** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10100	15				0	0	9238	8.5	10	
Arsenic	ND	8.3				0	0	6.137		10	
Barium	50.6	1.0				0	0	46.78	7.9	10	
Beryllium	0.426	1.0				0	0	0.401		10	N
Boron	5.06	2.4				0	0	2.575		10	N
Cadmium	0.890	1.0				0	0	0.9411		10	N
Chromium	4.91	1.4				0	0	5.307		10	N
Cobalt	ND	2.6				0	0			10	
Copper	82.9	5.1				0	0	78.28	5.7	10	
Iron	7380	14				0	0	6737	9.2	10	
Lead	37.0	15				0	0	43.24		10	N
Manganese	504	1.0				0	0	461.7	8.7	10	
Nickel	4.39	1.6				0	0	3.177		10	N
Vanadium	11.3	3.4				0	0	9.034		10	N
Zinc	246	2.1				0	0	231.7	5.9	10	

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICP2-HE_140407B: 31** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-031APDS** Method: **SW6010B**

Analysis Date: **04/07/14 12:32** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10300	5.0	1186	9238		75	125				A
Arsenic	235	1.7	237.1	6.137	97	75	125				
Barium	280	1.0	237.1	46.78	98	75	125				
Beryllium	112	1.0	118.6	0.401	94	75	125				
Boron	226	1.0	237.1	2.575	94	75	125				
Cadmium	112	1.0	118.6	0.9411	94	75	125				
Chromium	228	1.0	237.1	5.307	94	75	125				
Cobalt	223	1.0	237.1		94	75	125				
Copper	307	1.0	237.1	78.28	96	75	125				
Iron	7720	5.0	1186	6737		75	125				A
Lead	264	3.0	237.1	43.24	93	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 31** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-031APDS** Method: **SW6010B**

Analysis Date: **04/07/14 12:32** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	1560	1.0	1186	461.7	92	75	125				
Nickel	220	1.0	237.1	3.177	91	75	125				
Vanadium	230	1.0	237.1	9.034	93	75	125				
Zinc	455	1.0	237.1	231.7	94	75	125				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICP2-HE_140407B: 32** SampType: **Sample Matrix Spike** Lab ID: **H14030374-031AMS** Method: **SW6010B**

Analysis Date: **04/07/14 12:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12400	5.0	230.2	9238		75	125				A
Arsenic	52.6	1.7	46.04	6.137	101	75	125				
Barium	96.8	1.0	46.04	46.78	109	75	125				
Beryllium	23.8	1.0	23.02	0.401	102	75	125				
Boron	47.2	1.0	46.04	2.575	97	75	125				
Cadmium	23.0	1.0	23.02	0.9411	96	75	125				
Chromium	50.6	1.0	46.04	5.307	98	75	125				
Cobalt	44.4	1.0	46.04		96	75	125				
Copper	125	1.0	46.04	78.28	102	75	125				
Iron	8120	5.0	230.2	6737		75	125				A
Lead	85.2	2.9	46.04	43.24	91	75	125				
Manganese	717	1.0	230.2	461.7	111	75	125				
Nickel	46.7	1.0	46.04	3.177	95	75	125				
Vanadium	56.6	1.0	46.04	9.034	103	75	125				
Zinc	279	1.0	46.04	231.7		75	125				A

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031AMSD** Method: **SW6010B**

Analysis Date: **04/07/14 12:39** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12700	5.0	232.3	9238		75	125	12440	1.9	20	A
Arsenic	55.1	1.7	46.47	6.137	105	75	125	52.55	4.7	20	
Barium	98.6	1.0	46.47	46.78	112	75	125	96.75	1.9	20	
Beryllium	24.0	1.0	23.23	0.401	102	75	125	23.8	1.0	20	
Boron	48.5	1.0	46.47	2.575	99	75	125	47.21	2.7	20	
Cadmium	24.1	1.0	23.23	0.9411	100	75	125	22.96	5.0	20	
Chromium	52.7	1.0	46.47	5.307	102	75	125	50.62	4.0	20	
Cobalt	46.3	1.0	46.47		100	75	125	44.36	4.4	20	
Copper	128	1.0	46.47	78.28	108	75	125	125.4	2.3	20	
Iron	8270	5.0	232.3	6737		75	125	8116	1.9	20	A
Lead	92.6	3.0	46.47	43.24	106	75	125	85.22	8.3	20	
Manganese	734	1.0	232.3	461.7	117	75	125	716.9	2.3	20	
Nickel	49.3	1.0	46.47	3.177	99	75	125	46.73	5.3	20	
Vanadium	57.3	1.0	46.47	9.034	104	75	125	56.59	1.3	20	
Zinc	295	1.0	46.47	231.7		75	125	278.5	5.7	20	A

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 152** SampType: **Method Blank** Lab ID: **MB-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:27** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICPMS204-B_140407B: 153** SampType: **Laboratory Control Sample** Lab ID: **LCS-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:31** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.5	1.0	118.9		40	2.2	92.9				
Arsenic	300	1.0	323.6		93	72.3	106.4				
Cadmium	125	1.0	129.2		97	73	105.1				
Molybdenum	148	1.0	162.3		91	68.6	105.8				
Selenium	188	1.0	184.9		102	72.5	112.2				
Silver	63.0	1.0	65.09		97	67.8	112.8				
Uranium	110	1.0	94.34		117	80	120				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICPMS204-B_140407B: 154** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6020**
Analysis Date: **04/08/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.9	1.0	50		102	80	120				
Arsenic	53.2	1.0	50		106	80	120				
Cadmium	27.1	1.0	25		108	80	120				
Molybdenum	50.5	1.0	50		101	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 154** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24079** Method: **SW6020**

Analysis Date: **04/08/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/3/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	53.3	1.0	50		107	80	120				
Silver	25.3	1.0	25		101	80	120				
Uranium	52.2	1.0	50		104	80	120				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICPMS204-B_140407B: 168** SampType: **Sample Matrix Spike** Lab ID: **H14030374-031AMS** Method: **SW6020**

Analysis Date: **04/08/14 02:38** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.3	1.0	46.04	0.1457	39	75	125				S
Arsenic	55.6	1.0	46.04	6.317	107	75	125				
Cadmium	25.9	1.0	23.02	1.285	107	75	125				
Molybdenum	46.8	1.0	46.04	0.9827	100	75	125				
Selenium	50.7	1.0	46.04		110	75	125				
Silver	23.7	1.0	23.02	0.4118	101	75	125				
Uranium	50.2	1.0	46.04	1.156	106	75	125				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICPMS204-B_140407B: 169** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031AMSD** Method: **SW6020**

Analysis Date: **04/08/14 02:42** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	16.8	1.0	46.47	0.1457	36	75	125	18.26	8.1	20	S
Arsenic	56.4	1.0	46.47	6.317	108	75	125	55.64	1.3	20	
Cadmium	26.2	1.0	23.23	1.285	107	75	125	25.9	1.0	20	
Molybdenum	47.3	1.0	46.47	0.9827	100	75	125	46.82	1.1	20	
Selenium	49.3	1.0	46.47		106	75	125	50.69	2.7	20	
Silver	24.3	1.0	23.23	0.4118	103	75	125	23.69	2.8	20	
Uranium	50.7	1.0	46.47	1.156	107	75	125	50.16	1.0	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24079

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 169** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-031AMSD** Method: **SW6020**

Analysis Date: **04/08/14 02:42** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24097

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 35** SampType: **Method Blank** Lab ID: **MB-24097** Method: **SW7471B**
Analysis Date: **04/09/14 11:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0009									

Associated samples: **H14030374-019A; H14030374-019B**

Run ID :Run Order: **HGCV201-H_140409A: 36** SampType: **Laboratory Control Sample** Lab ID: **LCS-24097** Method: **SW7471B**
Analysis Date: **04/09/14 11:12** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.6	0.50	4.897		93	80	120				

Associated samples: **H14030374-019A; H14030374-019B**

Run ID :Run Order: **HGCV201-H_140409A: 37** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24097** Method: **SW7471B**
Analysis Date: **04/09/14 11:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		104	80	120				

Associated samples: **H14030374-019A; H14030374-019B**

Run ID :Run Order: **HGCV201-H_140409A: 43** SampType: **Sample Matrix Spike** Lab ID: **H14040040-010AMS** Method: **SW7471B**
Analysis Date: **04/09/14 11:29** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	0.998	0.01032	102	80	120				

Associated samples: **H14030374-019A; H14030374-019B**

Run ID :Run Order: **HGCV201-H_140409A: 44** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14040040-010AMSD** Method: **SW7471B**
Analysis Date: **04/09/14 11:31** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	0.998	0.01032	102	80	120	1.026	0.3	20	

Associated samples: **H14030374-019A; H14030374-019B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24097

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 55** SampType: **Sample Matrix Spike** Lab ID: **H14030371-006AMS** Method: **SW7471B**

Analysis Date: **04/09/14 12:06** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.99	0.50	0.999	0.005202	99	80	120				

Associated samples: **H14030374-019A; H14030374-019B**

Run ID :Run Order: **HGCV201-H_140409A: 56** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-006AMSD** Method: **SW7471B**

Analysis Date: **04/09/14 12:08** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.99	0.50	0.997	0.005202	99	80	120	0.9932	0.0	20	

Associated samples: **H14030374-019A; H14030374-019B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24116

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 67** SampType: **Method Blank** Lab ID: **MB-24116** Method: **SW7471B**
Analysis Date: **04/09/14 12:35** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0009									

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Run ID :Run Order: **HGCV201-H_140409A: 68** SampType: **Laboratory Control Sample** Lab ID: **LCS-24116** Method: **SW7471B**
Analysis Date: **04/09/14 12:37** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.5	0.50	4.892		93	80	120				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Run ID :Run Order: **HGCV201-H_140409A: 69** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24116** Method: **SW7471B**
Analysis Date: **04/09/14 12:40** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		104	80	120				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Run ID :Run Order: **HGCV201-H_140409A: 72** SampType: **Sample Matrix Spike** Lab ID: **H14030374-021AMS** Method: **SW7471B**
Analysis Date: **04/09/14 12:47** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	0.9872	0.04684	97	80	120				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24116

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 73** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-021AMSD** Method: **SW7471B**

Analysis Date: **04/09/14 12:49** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	0.9881	0.04684	97	80	120	1.003	0.5	20	

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Run ID :Run Order: **HGCV201-H_140409A: 88** SampType: **Sample Matrix Spike** Lab ID: **H14030374-032AMS** Method: **SW7471B**

Analysis Date: **04/09/14 13:26** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.9901	0.2599	99	80	120				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Run ID :Run Order: **HGCV201-H_140409A: 89** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-032AMSD** Method: **SW7471B**

Analysis Date: **04/09/14 13:28** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.9881	0.2599	100	80	120	1.239	1.0	20	

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-022A; H14030374-022B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-025A; H14030374-025B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-028A; H14030374-028B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-031A; H14030374-031B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-034A; H14030374-034B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-037A; H14030374-037B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24117

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 98** SampType: **Method Blank** Lab ID: **MB-24117** Method: **SW7471B**
Analysis Date: **04/09/14 13:50** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0009									

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Run ID :Run Order: **HGCV201-H_140409A: 99** SampType: **Laboratory Control Sample** Lab ID: **LCS-24117** Method: **SW7471B**
Analysis Date: **04/09/14 13:53** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.4	0.50	4.912		89	80	120				

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Run ID :Run Order: **HGCV201-H_140409A: 100** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24117** Method: **SW7471B**
Analysis Date: **04/09/14 13:55** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1		106	80	120				

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Run ID :Run Order: **HGCV201-H_140409A: 108** SampType: **Sample Matrix Spike** Lab ID: **H14030374-044AMS** Method: **SW7471B**
Analysis Date: **04/09/14 14:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9911	0.02878	106	80	120				

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24117

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140409A: 109** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-044AMSD** Method: **SW7471B**

Analysis Date: **04/09/14 14:17** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.996	0.02878	107	80	120	1.079	1.0	20	

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Run ID :Run Order: **HGCV201-H_140409A: 123** SampType: **Sample Matrix Spike** Lab ID: **H14030374-054AMS** Method: **SW7471B**

Analysis Date: **04/09/14 14:52** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.996	0.1497	99	80	120				

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Run ID :Run Order: **HGCV201-H_140409A: 124** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-054AMSD** Method: **SW7471B**

Analysis Date: **04/09/14 14:54** Units: **mg/kg** **Prep Info:** Prep Date: **4/7/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.998	0.1497	100	80	120	1.136	1.4	20	

Associated samples: **H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-040A; H14030374-040B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-043A; H14030374-043B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-046A; H14030374-046B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-049A; H14030374-049B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-052A; H14030374-052B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-055A; H14030374-055B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24131

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140410A: 4** SampType: **Method Blank** Lab ID: **MB-24131** Method: **SW7471B**
Analysis Date: **04/10/14 15:19** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0009									

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 6** SampType: **Laboratory Control Sample** Lab ID: **LCS-24131** Method: **SW7471B**
Analysis Date: **04/10/14 15:26** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	3.9	0.50	4.878		81	80	120				

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 7** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24131** Method: **SW7471B**
Analysis Date: **04/10/14 15:29** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.97	0.50	1		97	80	120				

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 9** SampType: **Sample Matrix Spike** Lab ID: **H14040111-002AMS** Method: **SW7471B**
Analysis Date: **04/10/14 15:33** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.96	0.50	0.9921	0.003485	96	80	120				

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 10** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14040111-002AMSD** Method: **SW7471B**
Analysis Date: **04/10/14 15:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.96	0.50	0.9901	0.003485	97	80	120	0.9594	0.3	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24131

Date: *23-Apr-14*

Run ID :Run Order: **HGCV201-H_140410A: 10** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14040111-002AMSD** Method: **SW7471B**

Analysis Date: **04/10/14 15:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 26** SampType: **Sample Matrix Spike** Lab ID: **H14040075-001AMS** Method: **SW7471B**

Analysis Date: **04/10/14 16:21** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.88	0.50	0.999	0.1043	78	80	120				S

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **HGCV201-H_140410A: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14040075-001AMSD** Method: **SW7471B**

Analysis Date: **04/10/14 16:24** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.98	0.50	0.999	0.1043	87	80	120	0.8847	9.8	20	

Associated samples: **H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-058A; H14030374-058B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-061A; H14030374-061B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-064A; H14030374-064B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24149

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 48** SampType: **Method Blank** Lab ID: **MB-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:30** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									
Barium	0.03	0.02									
Chromium	ND	0.2									
Copper	0.3	0.2									
Lead	ND	0.6									
Manganese	ND	0.02									
Vanadium	ND	0.1									

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 49** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:34** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.8	1.0	50		94	80	120				
Barium	47.6	1.0	50	0.028	95	80	120				
Chromium	47.3	1.0	50		95	80	120				
Copper	47.8	1.0	50	0.313	95	80	120				
Lead	44.0	1.0	50		88	80	120				
Manganese	235	1.0	250		94	80	120				
Vanadium	47.5	1.0	50		95	80	120				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 50** SampType: **Laboratory Control Sample** Lab ID: **LCS-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:38** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	252	1.8	336.3		75	72.3	106.4				
Barium	483	1.0	602	0.028	80	80.6	112.2				
Chromium	61.3	1.0	74.51		82	72.8	109.1				
Copper	224	1.1	274.5	0.313	82	77.5	109.6				
Lead	156	3.1	183.3		85	75.9	108.6				
Manganese	358	1.0	361.8		99	80.8	115.7				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24149

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 50** SampType: **Laboratory Control Sample** Lab ID: **LCS-24149** Method: **SW6010B**
Analysis Date: **04/11/14 16:38** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	56.5	1.0	71.57		79	66.6	107.3				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 80** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**
Analysis Date: **04/11/14 18:29** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.4	8.4				0	0	44.27		10	N
Barium	85.4	1.0				0	0	81.78	4.3	10	
Chromium	7.13	1.4				0	0	6.387		10	N
Copper	127	5.1				0	0	119.8	6.0	10	
Lead	41.7	15				0	0	21.25		10	N
Manganese	284	1.0				0	0	268.4	5.6	10	
Vanadium	20.7	3.5				0	0	16.8		10	N

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 81** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-063APDS** Method: **SW6010B**
Analysis Date: **04/11/14 18:32** Units: **mg/kg** **Prep Info:** Prep Date: **4/9/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	288	1.7	240.7	44.27	101	75	125				
Barium	312	1.0	240.7	81.78	96	75	125				
Chromium	237	1.0	240.7	6.387	96	75	125				
Copper	349	1.1	240.7	119.8	95	75	125				
Lead	252	3.1	240.7	21.25	96	75	125				
Manganese	1400	1.0	1203	268.4	94	75	125				
Vanadium	248	1.0	240.7	16.8	96	75	125				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24149

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 82** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6010B**

Analysis Date: **04/11/14 18:36** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	61.5	1.8	48.73	44.27	35	75	125				S
Barium	94.9	1.0	48.73	81.78	27	75	125				S
Chromium	53.7	1.0	48.73	6.387	97	75	125				
Copper	86.4	1.1	48.73	119.8	-68	75	125				S
Lead	69.2	3.1	48.73	21.25	98	75	125				
Manganese	554	1.0	243.7	268.4	117	75	125				
Vanadium	64.9	1.0	48.73	16.8	99	75	125				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 83** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/11/14 18:40** Units: **mg/kg** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	66.1	1.7	48.17	44.27	45	75	125	61.47	7.2	20	S
Barium	99.4	1.0	48.17	81.78	37	75	125	94.85	4.7	20	S
Chromium	53.2	1.0	48.17	6.387	97	75	125	53.73	1.0	20	
Copper	124	1.1	48.17	119.8	8	75	125	86.43	35	20	SR
Lead	73.3	3.1	48.17	21.25	108	75	125	69.23	5.8	20	
Manganese	528	1.0	240.8	268.4	108	75	125	553.8	4.8	20	
Vanadium	67.3	1.0	48.17	16.8	105	75	125	64.92	3.7	20	

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 26** SampType: **Method Blank** Lab ID: **MB-24203** Method: **SW6010B**

Analysis Date: **04/16/14 18:10** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	ND	0.02									
Boron	ND	0.1									
Copper	0.2	0.2									
Iron	2	0.6									
Lead	ND	0.6									
Manganese	ND	0.02									
Vanadium	ND	0.1									
Zinc	0.2	0.09									

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140416D: 27** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24203** Method: **SW6010B**

Analysis Date: **04/16/14 18:14** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	229	5.0	250		91	80	120				
Barium	46.2	1.0	50		92	80	120				
Boron	43.5	1.0	50		87	80	120				
Copper	45.6	1.0	50	0.2265	91	80	120				
Iron	227	5.0	250	2.41	90	80	120				
Lead	43.5	1.0	50		87	80	120				
Manganese	224	1.0	250		90	80	120				
Vanadium	45.7	1.0	50		91	80	120				
Zinc	44.2	1.0	50	0.213	88	80	120				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 28** SampType: **Laboratory Control Sample** Lab ID: **LCS-24203** Method: **SW6010B**

Analysis Date: **04/16/14 18:17** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11600	5.0	14410		81	50.7	131.3				
Barium	516	1.0	602		86	80.6	112.2				
Boron	66.3	1.0	91.37		73	59.4	101.9				
Copper	233	1.1	274.5	0.2265	85	77.5	109.6				
Iron	17300	5.0	22550	2.41	77	39.6	138.3				
Lead	158	3.1	183.3		86	75.9	108.6				
Manganese	333	1.0	361.8		92	80.8	115.7				
Vanadium	56.6	1.0	71.57		79	66.6	107.3				
Zinc	172	1.0	208.8	0.213	82	74.2	109.9				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140416D: 51** SampType: **Serial Dilution** Lab ID: **H14030374-063ADIL** Method: **SW6010B**

Analysis Date: **04/16/14 19:41** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2310	17				0	0	2332	1.0	10	
Barium	48.0	1.0				0	0	49.07	2.2	10	
Boron	ND	2.6				0	0	0.8635		10	
Copper	48.3	5.5				0	0	50.12		10	N
Iron	5900	15				0	0	5932	0.5	10	
Lead	ND	16				0	0	10.64		10	
Manganese	293	1.0				0	0	295.9	1.1	10	
Vanadium	15.4	3.7				0	0	15.82		10	N
Zinc	109	2.3				0	0	104.8	3.8	10	

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 52** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14030374-063APDS** Method: **SW6010B**

Analysis Date: **04/16/14 19:45** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3580	5.0	1288	2332	97	75	125				
Barium	301	1.0	257.5	49.07	98	75	125				
Boron	235	1.0	257.5	0.8635	91	75	125				
Copper	298	1.1	257.5	50.12	96	75	125				
Iron	7020	5.0	1288	5932		75	125				A
Lead	239	3.3	257.5	10.64	89	75	125				
Manganese	1500	1.0	1288	295.9	93	75	125				
Vanadium	263	1.0	257.5	15.82	96	75	125				
Zinc	338	1.0	257.5	104.8	91	75	125				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140416D: 53** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6010B**

Analysis Date: **04/16/14 19:49** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3660	5.0	250	2332		75	125				A
Barium	98.5	1.0	50	49.07	99	75	125				
Boron	46.3	1.0	50	0.8635	91	75	125				
Copper	118	1.1	50	50.12	135	75	125				S
Iron	5770	5.0	250	5932		75	125				A
Lead	77.0	3.2	50	10.64	133	75	125				S
Manganese	462	1.0	250	295.9	67	75	125				S
Vanadium	65.7	1.0	50	15.82	100	75	125				
Zinc	124	1.0	50	104.8	39	75	125				S

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 54** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6010B**

Analysis Date: **04/16/14 19:52** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3410	5.0	250	2332		75	125	3565	4.4	20	A
Barium	98.1	1.0	50	49.07	98	75	125	95.99	2.2	20	
Boron	48.8	1.0	50	0.8635	96	75	125	45.17	7.7	20	
Copper	107	1.1	50	50.12	113	75	125	114.7	7.3	20	
Iron	5630	5.0	250	5932		75	125	5623	0.1	20	A
Lead	68.0	3.2	50	10.64	115	75	125	75.04	9.8	20	
Manganese	512	1.0	250	295.9	86	75	125	450.5	13	20	
Vanadium	63.4	1.0	50	15.82	95	75	125	64.05	1.0	20	
Zinc	178	1.0	50	104.8	147	75	125	120.9	38	20	SR

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140417A: 17** SampType: **Method Blank** Lab ID: **MB-24203** Method: **SW6020**
Analysis Date: **04/17/14 10:57** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Cadmium	ND	0.2									
Molybdenum	0.2	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICPMS204-B_140417A: 18** SampType: **Laboratory Control Sample** Lab ID: **LCS-24203** Method: **SW6020**
Analysis Date: **04/17/14 11:01** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	41.8	1.0	123.5		**34**	2.2	92.9				
Cadmium	125	1.0	134.3		**93**	73	105.1				
Molybdenum	145	1.0	168.6	0.1825	**86**	68.6	105.8				
Selenium	193	1.0	192.2		**101**	72.5	112.2				
Silver	63.1	1.0	67.65		**93**	67.8	112.8				
Uranium	110	1.0	98.04		**112**	80	120				

Associated samples: **H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICPMS204-B_140417A: 19** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24203** Method: **SW6020**
Analysis Date: **04/17/14 11:05** Units: **mg/kg** **Prep Info:** Prep Date: **4/15/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.9	1.0	50		**100**	80	120				
Cadmium	26.4	1.0	25		**105**	80	120				
Molybdenum	50.2	1.0	50	0.1825	**100**	80	120				
Selenium	53.5	1.0	50		**107**	80	120				
Silver	25.3	1.0	25		**101**	80	120				
Uranium	52.2	1.0	50		**104**	80	120				

Associated samples: **H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24203

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140417A: 23** SampType: **Sample Matrix Spike** Lab ID: **H14030374-063AMS** Method: **SW6020**

Analysis Date: **04/17/14 11:23** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.4	1.0	57.02	0.4335	81	75	125				
Cadmium	31.6	1.0	28.51	0.8085	108	75	125				
Molybdenum	58.0	1.0	57.02	0.6087	101	75	125				
Selenium	59.9	1.0	57.02		105	75	125				
Silver	29.6	1.0	28.51	0.7506	101	75	125				
Uranium	62.7	1.0	57.02	1.025	108	75	125				

Associated samples: **H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICPMS204-B_140417A: 24** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-063AMSD** Method: **SW6020**

Analysis Date: **04/17/14 11:27** Units: **mg/kg-dry** **Prep Info:** Prep Date: **4/4/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	44.9	1.0	56.36	0.4335	79	75	125	46.38	3.3	20	
Cadmium	30.2	1.0	28.18	0.8085	104	75	125	31.56	4.3	20	
Molybdenum	56.4	1.0	56.36	0.6087	99	75	125	58.04	2.9	20	
Selenium	60.4	1.0	56.36		107	75	125	59.93	0.7	20	
Silver	28.9	1.0	28.18	0.7506	100	75	125	29.65	2.4	20	
Uranium	60.4	1.0	56.36	1.025	105	75	125	62.75	3.9	20	

Associated samples: **H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24251

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140421B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24251** Method: **A4500 N-C**
Analysis Date: **04/21/14 12:17** Units: **mg/L** **Prep Info:** Prep Date: **4/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	18.1	0.30	18.7	0.03288	97	90	110				

Associated samples: **H14030374-003A**

Run ID :Run Order: **FIA203-HE_140421B: 12** SampType: **Method Blank** Lab ID: **MB-24251** Method: **A4500 N-C**
Analysis Date: **04/21/14 12:18** Units: **mg/L** **Prep Info:** Prep Date: **4/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.03	0.02									

Associated samples: **H14030374-003A**

Run ID :Run Order: **FIA203-HE_140421B: 16** SampType: **Sample Matrix Spike** Lab ID: **H14040264-001BMS** Method: **A4500 N-C**
Analysis Date: **04/21/14 12:23** Units: **mg/L** **Prep Info:** Prep Date: **4/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.25	0.10	1	0.3068	94	90	110				

Associated samples: **H14030374-003A**

Run ID :Run Order: **FIA203-HE_140421B: 17** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14040264-001BMSD** Method: **A4500 N-C**
Analysis Date: **04/21/14 12:24** Units: **mg/L** **Prep Info:** Prep Date: **4/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.27	0.10	1	0.3068	96	90	110	1.25	1.4	20	

Associated samples: **H14030374-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95844

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140327A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **03/27/14 12:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.965	0.010	1		97	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **03/27/14 12:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.922	0.011	1		92	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **03/27/14 12:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	-0.0175	0.010				0	0				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **03/27/14 12:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	ND	0.001									

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 27** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **03/27/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.499	0.010	0.5		100	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95844

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140327A: 27** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **03/27/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001D; H14030374-002D**

Run ID :Run Order: **FIA203-HE_140327A: 42** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **03/27/14 13:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.498	0.010	0.5		100	90	110				

Associated samples: **H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D**

Run ID :Run Order: **FIA203-HE_140327A: 44** SampType: **Sample Matrix Spike** Lab ID: **H14030374-003DMS** Method: **E353.2**
Analysis Date: **03/27/14 13:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	2.12	0.011	1	1.248	87	90	110				S

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 45** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-003DMSD** Method: **E353.2**
Analysis Date: **03/27/14 13:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	2.11	0.011	1	1.248	86	90	110	2.115	0.4	20	S

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 56** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **03/27/14 13:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.490	0.010	0.5		98	90	110				

Associated samples: **H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95844

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140327A: 58** SampType: **Sample Matrix Spike** Lab ID: **H14030374-013DMS** Method: **E353.2**

Analysis Date: **03/27/14 13:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	2.20	0.011	1	1.301	90	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140327A: 59** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-013DMSD** Method: **E353.2**

Analysis Date: **03/27/14 13:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	2.17	0.011	1	1.301	87	90	110	2.198	1.1	20	S

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **03/27/14 09:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.761	0.10	0.8		95	95	105				
Calcium	39.7	1.0	40		99	95	105				
Magnesium	38.7	1.0	40		97	95	105				
Potassium	40.5	1.0	40		101	95	105				
Sodium	40.6	1.0	40		102	95	105				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **03/27/14 09:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.52	0.10	2.5		101	95	105				
Calcium	25.5	1.0	25		102	95	105				
Magnesium	24.8	1.0	25		99	95	105				
Potassium	24.9	1.0	25		100	95	105				
Sodium	24.9	1.0	25		100	95	105				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **03/27/14 09:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	-0.00331	0.10				0	0				
Calcium	464	1.0	500		93	80	120				
Magnesium	492	1.0	500		98	80	120				
Potassium	-0.114	1.0				0	0				
Sodium	0.0320	1.0				0	0				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **03/27/14 09:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.987	0.10	1		99	80	120				
Calcium	473	1.0	500		95	80	120				
Magnesium	503	1.0	500		101	80	120				
Potassium	19.8	1.0	20		99	80	120				
Sodium	19.7	1.0	20		99	80	120				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**

Analysis Date: **03/27/14 09:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.1	0.03									
Magnesium	ND	0.04									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**

Analysis Date: **03/27/14 09:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.945	0.10	1		95	85	115				
Calcium	47.2	1.0	50	0.1115	94	85	115				
Magnesium	45.4	1.0	50		91	85	115				
Potassium	47.6	1.0	50		95	85	115				
Sodium	48.0	1.0	50		96	85	115				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 17** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001BMS2** Method: **E200.7**

Analysis Date: **03/27/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.991	0.050	1	0.02234	97	70	130				
Calcium	79.2	1.0	50	29.86	99	70	130				
Magnesium	54.3	1.0	50	7.267	94	70	130				
Potassium	53.4	1.0	50	3.691	99	70	130				
Sodium	61.4	1.0	50	11.38	100	70	130				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 18** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-001BMSD2** Method: **E200.7**

Analysis Date: **03/27/14 09:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.972	0.050	1	0.02234	95	70	130	0.9906	1.9	20	
Calcium	79.1	1.0	50	29.86	98	70	130	79.22	0.1	20	
Magnesium	54.0	1.0	50	7.267	93	70	130	54.34	0.6	20	
Potassium	53.5	1.0	50	3.691	100	70	130	53.43	0.2	20	
Sodium	61.4	1.0	50	11.38	100	70	130	61.42	0.0	20	

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **03/27/14 09:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.38	0.10	2.5		95	90	110				
Calcium	24.7	1.0	25		99	90	110				
Magnesium	22.9	1.0	25		92	90	110				
Potassium	24.4	1.0	25		98	90	110				
Sodium	24.5	1.0	25		98	90	110				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **03/27/14 10:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.48	0.10	2.5		99	90	110				
Calcium	25.3	1.0	25		101	90	110				
Magnesium	23.5	1.0	25		94	90	110				
Potassium	24.7	1.0	25		99	90	110				
Sodium	24.7	1.0	25		99	90	110				

Associated samples: **H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B**

Run ID :Run Order: **ICP2-HE_140327A: 34** SampType: **Sample Matrix Spike** Lab ID: **H14030374-008BMS2** Method: **E200.7**

Analysis Date: **03/27/14 10:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.04	0.050	1	0.06968	97	70	130				
Calcium	111	1.0	50	59.53	102	70	130				
Magnesium	60.2	1.0	50	12.36	96	70	130				
Potassium	56.2	1.0	50	6.369	100	70	130				
Sodium	81.6	1.0	50	31.85	99	70	130				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 35** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-008BMSD2** Method: **E200.7**

Analysis Date: **03/27/14 10:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.03	0.050	1	0.06968	96	70	130	1.041	0.7	20	
Calcium	109	1.0	50	59.53	100	70	130	110.7	1.3	20	
Magnesium	59.7	1.0	50	12.36	95	70	130	60.24	1.0	20	
Potassium	55.7	1.0	50	6.369	99	70	130	56.24	1.0	20	
Sodium	80.7	1.0	50	31.85	98	70	130	81.58	1.2	20	

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95851

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140327A: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **03/27/14 11:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.42	0.10	2.5		97	90	110				
Calcium	25.1	1.0	25		100	90	110				
Magnesium	23.2	1.0	25		93	90	110				
Potassium	24.8	1.0	25		99	90	110				
Sodium	24.8	1.0	25		99	90	110				

Associated samples: **H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 49** SampType: **Sample Matrix Spike** Lab ID: **H14030374-018BMS2** Method: **E200.7**

Analysis Date: **03/27/14 11:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.01	0.050	1	0.0494	96	70	130				
Calcium	101	1.0	50	53.09	96	70	130				
Magnesium	57.6	1.0	50	11.02	93	70	130				
Potassium	54.6	1.0	50	5.276	99	70	130				
Sodium	76.7	1.0	50	27.57	98	70	130				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICP2-HE_140327A: 50** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-018BMSD2** Method: **E200.7**

Analysis Date: **03/27/14 11:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.989	0.050	1	0.0494	94	70	130	1.009	2.1	20	
Calcium	102	1.0	50	53.09	97	70	130	101.2	0.5	20	
Magnesium	57.8	1.0	50	11.02	94	70	130	57.6	0.4	20	
Potassium	54.6	1.0	50	5.276	99	70	130	54.55	0.1	20	
Sodium	76.6	1.0	50	27.57	98	70	130	76.69	0.1	20	

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95852

Date: *23-Apr-14*

Run ID :Run Order: **IC102-H_140327A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **03/27/14 11:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		100	90	110				
Sulfate	400	1.0	400		99	90	110				

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **03/27/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.008									
Sulfate	ND	0.08									

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **03/27/14 11:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	51	1.0	50		102	90	110				
Sulfate	210	1.0	200		103	90	110				

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 58** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV032714-3** Method: **E300.0**
Analysis Date: **03/27/14 19:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	430	1.0	400		109	90	110				

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A**

Run ID :Run Order: **IC102-H_140327A: 61** SampType: **Sample Matrix Spike** Lab ID: **H14030371-002AMS** Method: **E300.0**
Analysis Date: **03/27/14 19:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	77	1.0	50	24.21	105	90	110				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95852

Date: *23-Apr-14*

Run ID :Run Order: **IC102-H_140327A: 61** SampType: **Sample Matrix Spike** Lab ID: **H14030371-002AMS** Method: **E300.0**
Analysis Date: **03/27/14 19:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	250	1.0	200	39.72	107	90	110				

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 62** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-002AMSD** Method: **E300.0**
Analysis Date: **03/27/14 20:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	77	1.0	50	24.21	106	90	110	76.74	0.7	20	
Sulfate	260	1.0	200	39.72	109	90	110	254.5	1.1	20	

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 72** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV032714-4** Method: **E300.0**
Analysis Date: **03/27/14 21:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		108	90	110				
Sulfate	440	1.0	400		110	90	110				

Associated samples: **H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 75** SampType: **Sample Matrix Spike** Lab ID: **H14030374-009AMS** Method: **E300.0**
Analysis Date: **03/27/14 22:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	50	56.29	108	90	110				
Sulfate	310	1.0	200	96.39	109	90	110				

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Run ID :Run Order: **IC102-H_140327A: 76** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-009AMSD** Method: **E300.0**
Analysis Date: **03/27/14 22:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	50	56.29	110	90	110	110.5	0.5	20	
Sulfate	320	1.0	200	96.39	110	90	110	314.9	0.6	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95852

Date: *23-Apr-14*

Run ID :Run Order: **IC102-H_140327A: 76** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-009AMSD** Method: **E300.0**

Analysis Date: **03/27/14 22:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-003A; H14030374-005A; H14030374-007A; H14030374-010A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-016A; H14030374-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95860

Date: *23-Apr-14*

Run ID :Run Order: **MAN-TECH_140327B: 56** SampType: **Method Blank** Lab ID: **MBLK** Method: **A2320 B**
Analysis Date: **03/27/14 20:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	ND	2									

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 58** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **03/27/14 20:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	620	4.0	600		104	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 62** SampType: **Sample Duplicate** Lab ID: **H14030353-013ADUP** Method: **A2320 B**
Analysis Date: **03/27/14 20:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	780	4.0						781.6	0.5	10	
Bicarbonate as HCO3	950	4.0						953.6	0.5	10	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 65** SampType: **Sample Matrix Spike** Lab ID: **H14030371-001AMS** Method: **A2320 B**
Analysis Date: **03/27/14 21:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	720	4.0	600	89.49	106	80	120				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 85** SampType: **Sample Duplicate** Lab ID: **H14030374-016ADUP** Method: **A2320 B**
Analysis Date: **03/27/14 23:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	110	4.0						113.4	0.6	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95860

Date: *23-Apr-14*

Run ID :Run Order: **MAN-TECH_140327B: 85** SampType: **Sample Duplicate** Lab ID: **H14030374-016ADUP** Method: **A2320 B**
Analysis Date: **03/27/14 23:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bicarbonate as HCO3	140	4.0						136.5	0.3	10	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 88** SampType: **Method Blank** Lab ID: **MBLK** Method: **A2320 B**
Analysis Date: **03/27/14 23:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	ND	2									

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 90** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **03/27/14 23:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	630	4.0	600		105	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 93** SampType: **Sample Duplicate** Lab ID: **H14030374-017ADUP** Method: **A2320 B**
Analysis Date: **03/27/14 23:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	110	4.0						105.9	0.3	10	
Bicarbonate as HCO3	130	4.0						129.2	0.4	10	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 96** SampType: **Sample Matrix Spike** Lab ID: **H14030374-018AMS** Method: **A2320 B**
Analysis Date: **03/28/14 00:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	740	4.0	600	108.4	105	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95860

Date: *23-Apr-14*

Run ID :Run Order: **MAN-TECH_140327B: 96** SampType: **Sample Matrix Spike** Lab ID: **H14030374-018AMS** Method: **A2320 B**

Analysis Date: **03/28/14 00:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **MAN-TECH_140327B: 108** SampType: **Sample Duplicate** Lab ID: **H14030389-008ADUP** Method: **A2320 B**

Analysis Date: **03/28/14 01:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	200	4.0						196.2	1.0	10	
Bicarbonate as HCO3	240	4.0						239.4	1.0	10	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95861

Date: *23-Apr-14*

Run ID :Run Order: **FIA202-HE_140328A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**
Analysis Date: **03/28/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.235	0.010	0.25		94	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA202-HE_140328A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **03/28/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0928	0.010	0.1		93	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D**

Run ID :Run Order: **FIA202-HE_140328A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**
Analysis Date: **03/28/14 10:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.000870	0.010				0	0				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA202-HE_140328A: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **03/28/14 10:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0933	0.010	0.1		93	90	110				

Associated samples:

Run ID :Run Order: **FIA202-HE_140328A: 39** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **03/28/14 10:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0947	0.010	0.1		95	90	110				

Associated samples: **H14030374-016D; H14030374-017D; H14030374-018D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95894

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140331A: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **03/31/14 09:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	15.7	0.50	15.2		103	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **03/31/14 09:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.974	0.055	1		97	90	110				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **03/31/14 09:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.000956	0.050				0	0				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 23** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **03/31/14 09:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.529	0.050	0.5		106	90	110				

Associated samples: **H14030374-001D**

Run ID :Run Order: **FIA203-HE_140331A: 37** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **03/31/14 09:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.483	0.050	0.5		97	90	110				

Associated samples: **H14030374-003D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-010D; H14030374-011D; H14030374-012D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95894

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140331A: 52** SampType: **Sample Matrix Spike** Lab ID: **H14030374-003DMS** Method: **E350.1**
Analysis Date: **03/31/14 10:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	14.0	0.55	10	3.936	101	80	120				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 53** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-003DMSD** Method: **E350.1**
Analysis Date: **03/31/14 10:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	13.7	0.55	10	3.936	98	80	120	13.99	1.9	10	

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 54** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **03/31/14 10:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.479	0.050	0.5		96	90	110				

Associated samples: **H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 57** SampType: **Sample Matrix Spike** Lab ID: **H14030374-013DMS** Method: **E350.1**
Analysis Date: **03/31/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.91	0.055	1	0.9589	95	80	120				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 58** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-013DMSD** Method: **E350.1**
Analysis Date: **03/31/14 10:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.90	0.055	1	0.9589	94	80	120	1.905	0.4	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95894

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140331A: 58** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-013DMSD** Method: **E350.1**

Analysis Date: **03/31/14 10:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 67** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**

Analysis Date: **03/31/14 10:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.497	0.050	0.5		99	90	110				

Associated samples: **H14030374-002D; H14030374-004D; H14030374-008D; H14030374-009D**

Run ID :Run Order: **FIA203-HE_140331A: 69** SampType: **Sample Matrix Spike** Lab ID: **H14030287-001BMS** Method: **E350.1**

Analysis Date: **03/31/14 10:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	74.5	2.8	50	27.08	95	80	120				

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Run ID :Run Order: **FIA203-HE_140331A: 70** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030287-001BMSD** Method: **E350.1**

Analysis Date: **03/31/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	75.2	2.8	50	27.08	96	80	120	74.47	1.0	10	

Associated samples: **H14030374-001D; H14030374-002D; H14030374-003D; H14030374-004D; H14030374-005D; H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D; H14030374-016D; H14030374-017D; H14030374-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95899

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140331C: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **03/31/14 14:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.541	0.10	0.5		108	90	110				

Associated samples:

Run ID :Run Order: **FIA203-HE_140331C: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**
Analysis Date: **03/31/14 14:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.0307	0.10				0	0				

Associated samples: **H14030374-008A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **FIA203-HE_140331C: 36** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **03/31/14 15:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.507	0.10	0.5		101	90	110				

Associated samples: **H14030374-008A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 29** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **03/28/14 12:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.289	0.10	0.3		96	90	110				
Antimony	0.0593	0.050	0.06		99	90	110				
Arsenic	0.0609	0.0050	0.06		101	90	110				
Barium	0.0605	0.10	0.06		101	90	110				
Beryllium	0.0299	0.0010	0.03		100	90	110				
Boron	0.0599	0.10	0.06		100	90	110				
Cadmium	0.0321	0.0010	0.03		107	90	110				
Calcium	3.21	0.50	3		107	90	110				
Chromium	0.0610	0.010	0.06		102	90	110				
Cobalt	0.0589	0.010	0.06		98	90	110				
Copper	0.0617	0.010	0.06		103	90	110				
Iron	0.306	0.020	0.3		102	90	110				
Lead	0.0627	0.010	0.06		105	90	110				
Magnesium	3.14	0.50	3		105	90	110				
Manganese	0.301	0.010	0.3		100	90	110				
Molybdenum	0.0589	0.0050	0.06		98	90	110				
Nickel	0.0617	0.010	0.06		103	90	110				
Potassium	3.11	0.50	3		104	90	110				
Selenium	0.0626	0.0050	0.06		104	90	110				
Silver	0.0307	0.0050	0.03		102	90	110				
Sodium	3.07	0.50	3		102	90	110				
Uranium	0.0602	0.0010	0.06		100	90	110				
Vanadium	0.0599	0.10	0.06		100	90	110				
Zinc	0.0622	0.010	0.06		104	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 30** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.4	0.10	40		93	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 30** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.000124	0.050									
Arsenic	0.000208	0.0050									
Barium	0.000183	0.10									
Beryllium	1.50E-05	0.0010									
Boron	0.000830	0.10									
Cadmium	0.000696	0.0010									
Calcium	110	0.50	120		92	70	130				
Chromium	0.00113	0.010									
Cobalt	0.000432	0.010									
Copper	0.000376	0.010									
Iron	95.2	0.020	100		95	70	130				
Lead	0.000257	0.010									
Magnesium	40.0	0.50	40		100	70	130				
Manganese	0.000166	0.010									
Molybdenum	0.731	0.0050	0.8		91	70	130				
Nickel	-0.000590	0.010									
Potassium	40.7	0.50	40		102	70	130				
Selenium	0.000701	0.0050									
Silver	0.000195	0.0050									
Sodium	99.9	0.50	100		100	70	130				
Uranium	4.30E-05	0.0010									
Vanadium	8.30E-05	0.10									
Zinc	0.00176	0.010									

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 31** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	36.8	0.10	40		92	70	130				
Antimony	0.000175	0.050				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 31** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0105	0.0050	0.01		105	70	130				
Barium	0.000163	0.10				0	0				
Beryllium	1.00E-06	0.0010				0	0				
Boron	0.000613	0.10				0	0				
Cadmium	0.00986	0.0010	0.01		99	70	130				
Calcium	111	0.50	120		92	70	130				
Chromium	0.0211	0.010	0.02		105	70	130				
Cobalt	0.0221	0.010	0.02		111	70	130				
Copper	0.0197	0.010	0.02		99	70	130				
Iron	95.9	0.020	100		96	70	130				
Lead	0.000249	0.010				0	0				
Magnesium	39.8	0.50	40		100	70	130				
Manganese	0.0221	0.010	0.02		110	70	130				
Molybdenum	0.733	0.0050	0.8		92	70	130				
Nickel	0.0193	0.010	0.02		96	70	130				
Potassium	41.2	0.50	40		103	70	130				
Selenium	0.00962	0.0050	0.01		96	70	130				
Silver	0.0188	0.0050	0.02		94	70	130				
Sodium	101	0.50	100		101	70	130				
Uranium	1.60E-05	0.0010				0	0				
Vanadium	0.0204	0.10	0.02		102	70	130				
Zinc	0.0109	0.010	0.01		109	70	130				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 38** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **03/28/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 38** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **03/28/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	ND	3E-05									
Iron	0.0005	0.0002									
Lead	ND	8E-06									
Magnesium	ND	0.0006									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	ND	0.0003									

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 39** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **03/28/14 13:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0512	0.10	0.05		102	85	115				
Antimony	0.0497	0.050	0.05		99	85	115				
Arsenic	0.0503	0.0050	0.05		101	85	115				
Barium	0.0494	0.10	0.05		99	85	115				
Beryllium	0.0497	0.0010	0.05		99	85	115				
Cadmium	0.0508	0.0010	0.05		102	85	115				
Chromium	0.0502	0.010	0.05		100	85	115				
Cobalt	0.0551	0.010	0.05		110	85	115				
Copper	0.0509	0.010	0.05		102	85	115				
Iron	0.157	0.020	0.15	0.000511	104	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 39** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **03/28/14 13:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0510	0.010	0.05		102	85	115				
Magnesium	1.10	0.50	1		110	85	115				
Manganese	0.0508	0.010	0.05		102	85	115				
Molybdenum	0.0484	0.0050	0.05		97	85	115				
Nickel	0.0517	0.010	0.05		103	85	115				
Selenium	0.0523	0.0050	0.05		105	85	115				
Silver	0.0200	0.0050	0.02		100	85	115				
Uranium	0.0465	0.0010	0.05		93	85	115				
Vanadium	0.0492	0.10	0.05		98	85	115				
Zinc	0.0521	0.010	0.05		104	85	115				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 78** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **03/28/14 15:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.297	0.10	0.3		99	90	110				
Antimony	0.0590	0.050	0.06		98	90	110				
Arsenic	0.0610	0.0050	0.06		102	90	110				
Barium	0.0598	0.10	0.06		100	90	110				
Beryllium	0.0306	0.0010	0.03		102	90	110				
Boron	0.0617	0.10	0.06		103	90	110				
Cadmium	0.0321	0.0010	0.03		107	90	110				
Calcium	3.22	0.50	3		107	90	110				
Chromium	0.0617	0.010	0.06		103	90	110				
Cobalt	0.0592	0.010	0.06		99	90	110				
Copper	0.0627	0.010	0.06		105	90	110				
Iron	0.319	0.020	0.3		106	90	110				
Lead	0.0619	0.010	0.06		103	90	110				
Magnesium	3.16	0.50	3		105	90	110				
Manganese	0.301	0.010	0.3		100	90	110				
Molybdenum	0.0591	0.0050	0.06		98	90	110				
Nickel	0.0626	0.010	0.06		104	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 78** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **03/28/14 15:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	3.14	0.50	3		105	90	110				
Selenium	0.0649	0.0050	0.06		108	90	110				
Silver	0.0308	0.0050	0.03		103	90	110				
Sodium	3.07	0.50	3		102	90	110				
Uranium	0.0602	0.0010	0.06		100	90	110				
Vanadium	0.0599	0.10	0.06		100	90	110				
Zinc	0.0628	0.010	0.06		105	90	110				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 79** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 15:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.4	0.10	40		94	70	130				
Antimony	0.000127	0.050									
Arsenic	0.000266	0.0050									
Barium	0.000193	0.10									
Beryllium	2.10E-05	0.0010									
Boron	0.000791	0.10									
Cadmium	0.000660	0.0010									
Calcium	110	0.50	120		92	70	130				
Chromium	0.00114	0.010									
Cobalt	0.000371	0.010									
Copper	0.000393	0.010									
Iron	96.1	0.020	100		96	70	130				
Lead	0.000255	0.010									
Magnesium	39.8	0.50	40		99	70	130				
Manganese	0.000190	0.010									
Molybdenum	0.740	0.0050	0.8		93	70	130				
Nickel	0.000578	0.010									
Potassium	40.7	0.50	40		102	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 79** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/28/14 15:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.000693	0.0050									
Silver	0.000205	0.0050									
Sodium	99.4	0.50	100		99	70	130				
Uranium	4.70E-05	0.0010									
Vanadium	9.60E-05	0.10									
Zinc	0.00164	0.010									

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 80** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.4	0.10	40		94	70	130				
Antimony	0.000176	0.050				0	0				
Arsenic	0.0101	0.0050	0.01		101	70	130				
Barium	0.000214	0.10				0	0				
Beryllium	7.00E-06	0.0010				0	0				
Boron	0.000389	0.10				0	0				
Cadmium	0.0100	0.0010	0.01		100	70	130				
Calcium	111	0.50	120		92	70	130				
Chromium	0.0211	0.010	0.02		105	70	130				
Cobalt	0.0217	0.010	0.02		109	70	130				
Copper	0.0199	0.010	0.02		100	70	130				
Iron	98.8	0.020	100		99	70	130				
Lead	0.000253	0.010				0	0				
Magnesium	40.3	0.50	40		101	70	130				
Manganese	0.0220	0.010	0.02		110	70	130				
Molybdenum	0.739	0.0050	0.8		92	70	130				
Nickel	0.0203	0.010	0.02		101	70	130				
Potassium	40.5	0.50	40		101	70	130				
Selenium	0.00992	0.0050	0.01		99	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 80** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/28/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0190	0.0050	0.02		95	70	130				
Sodium	100	0.50	100		100	70	130				
Uranium	2.20E-05	0.0010				0	0				
Vanadium	0.0202	0.10	0.02		101	70	130				
Zinc	0.0117	0.010	0.01		117	70	130				

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 142** SampType: **Sample Matrix Spike** Lab ID: **H14030374-004BMS** Method: **E200.8**

Analysis Date: **03/28/14 20:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0528	0.030	0.05	0.004047	98	70	130				
Antimony	0.0507	0.0010	0.05	0.00035	101	70	130				
Arsenic	0.0565	0.0010	0.05	0.004632	104	70	130				
Barium	0.0967	0.050	0.05	0.04841	97	70	130				
Beryllium	0.0493	0.0010	0.05		99	70	130				
Cadmium	0.0521	0.0010	0.05	0.0001248	104	70	130				
Chromium	0.0490	0.0050	0.05	0.0001705	98	70	130				
Cobalt	0.0523	0.0050	0.05	0.0004657	104	70	130				
Copper	0.0589	0.0050	0.05	0.009747	98	70	130				
Iron	0.290	0.020	0.15	0.1418	99	70	130				
Lead	0.0523	0.0010	0.05	0.0004801	104	70	130				
Magnesium	13.5	1.0	1	12.61		70	130				A
Manganese	0.259	0.0010	0.05	0.2004		70	130				A
Molybdenum	0.0546	0.0010	0.05	0.005105	99	70	130				
Nickel	0.0499	0.0050	0.05	0.0007731	98	70	130				
Selenium	0.0555	0.0010	0.05	0.0001522	111	70	130				
Silver	0.0187	0.0010	0.02		94	70	130				
Uranium	0.0563	0.00030	0.05	0.005627	101	70	130				
Vanadium	0.0503	0.010	0.05	0.002041	97	70	130				
Zinc	0.105	0.010	0.05	0.05442	101	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 142** SampType: **Sample Matrix Spike** Lab ID: **H14030374-004BMS** Method: **E200.8**

Analysis Date: **03/28/14 20:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 143** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-004BMSD** Method: **E200.8**

Analysis Date: **03/28/14 20:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0534	0.030	0.05	0.004047	99	70	130	0.0528	1.2	20	
Antimony	0.0512	0.0010	0.05	0.00035	102	70	130	0.05072	1.0	20	
Arsenic	0.0569	0.0010	0.05	0.004632	105	70	130	0.0565	0.7	20	
Barium	0.0981	0.050	0.05	0.04841	99	70	130	0.09674	1.4	20	
Beryllium	0.0495	0.0010	0.05		99	70	130	0.04934	0.3	20	
Cadmium	0.0526	0.0010	0.05	0.0001248	105	70	130	0.05208	0.9	20	
Chromium	0.0500	0.0050	0.05	0.0001705	100	70	130	0.04903	1.9	20	
Cobalt	0.0506	0.0050	0.05	0.0004657	100	70	130	0.05227	3.2	20	
Copper	0.0596	0.0050	0.05	0.009747	100	70	130	0.0589	1.2	20	
Iron	0.287	0.020	0.15	0.1418	97	70	130	0.2899	1.0	20	
Lead	0.0522	0.0010	0.05	0.0004801	103	70	130	0.05234	0.2	20	
Magnesium	13.6	1.0	1	12.61		70	130	13.51	0.8	20	A
Manganese	0.256	0.0010	0.05	0.2004		70	130	0.2586	1.1	20	A
Molybdenum	0.0544	0.0010	0.05	0.005105	99	70	130	0.05457	0.3	20	
Nickel	0.0505	0.0050	0.05	0.0007731	99	70	130	0.04988	1.2	20	
Selenium	0.0548	0.0010	0.05	0.0001522	109	70	130	0.05549	1.2	20	
Silver	0.0191	0.0010	0.02		96	70	130	0.01872	2.1	20	
Uranium	0.0567	0.00030	0.05	0.005627	102	70	130	0.05628	0.8	20	
Vanadium	0.0513	0.010	0.05	0.002041	99	70	130	0.05031	2.0	20	
Zinc	0.107	0.010	0.05	0.05442	106	70	130	0.105	2.1	20	

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 176** SampType: **Sample Matrix Spike** Lab ID: **H14030374-014BMS** Method: **E200.8**

Analysis Date: **03/28/14 23:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0507	0.030	0.05	0.002657	96	70	130				
Antimony	0.0509	0.0010	0.05	0.000325	101	70	130				
Arsenic	0.0585	0.0010	0.05	0.006976	103	70	130				
Barium	0.0994	0.050	0.05	0.05025	98	70	130				
Beryllium	0.0498	0.0010	0.05		100	70	130				
Cadmium	0.0515	0.0010	0.05	0.0002346	102	70	130				
Chromium	0.0494	0.0050	0.05	0.0000475	99	70	130				
Cobalt	0.0540	0.0050	0.05	0.0003068	107	70	130				
Copper	0.0623	0.0050	0.05	0.01289	99	70	130				
Iron	0.232	0.020	0.15	0.09411	92	70	130				
Lead	0.0518	0.0010	0.05	0.0004658	103	70	130				
Magnesium	13.6	1.0	1	12.81		70	130				A
Manganese	0.364	0.0010	0.05	0.3226		70	130				A
Molybdenum	0.0545	0.0010	0.05	0.005186	99	70	130				
Nickel	0.0502	0.0050	0.05	0.0008691	99	70	130				
Selenium	0.0546	0.0010	0.05	0.0002646	109	70	130				
Silver	0.0173	0.0010	0.02		86	70	130				
Uranium	0.0575	0.00030	0.05	0.006593	102	70	130				
Vanadium	0.0511	0.010	0.05	0.002296	98	70	130				
Zinc	0.133	0.010	0.05	0.08461	97	70	130				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 177** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-014BMSD** Method: **E200.8**

Analysis Date: **03/28/14 23:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0513	0.030	0.05	0.002657	97	70	130	0.0507	1.1	20	
Antimony	0.0509	0.0010	0.05	0.000325	101	70	130	0.05092	0.0	20	
Arsenic	0.0594	0.0010	0.05	0.006976	105	70	130	0.05848	1.6	20	
Barium	0.0994	0.050	0.05	0.05025	98	70	130	0.09944	0.0	20	
Beryllium	0.0502	0.0010	0.05		100	70	130	0.04975	0.8	20	
Cadmium	0.0515	0.0010	0.05	0.0002346	103	70	130	0.05147	0.2	20	
Chromium	0.0496	0.0050	0.05	0.0000475	99	70	130	0.04945	0.3	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 177** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-014BMSD** Method: **E200.8**

Analysis Date: **03/28/14 23:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.0544	0.0050	0.05	0.0003068	108	70	130	0.05402	0.8	20	
Copper	0.0628	0.0050	0.05	0.01289	100	70	130	0.06229	0.8	20	
Iron	0.235	0.020	0.15	0.09411	94	70	130	0.2322	1.1	20	
Lead	0.0522	0.0010	0.05	0.0004658	104	70	130	0.05182	0.8	20	
Magnesium	13.8	1.0	1	12.81		70	130	13.62	1.3	20	A
Manganese	0.367	0.0010	0.05	0.3226		70	130	0.3639	1.0	20	A
Molybdenum	0.0555	0.0010	0.05	0.005186	101	70	130	0.05451	1.8	20	
Nickel	0.0502	0.0050	0.05	0.0008691	99	70	130	0.05022	0.1	20	
Selenium	0.0554	0.0010	0.05	0.0002646	110	70	130	0.05465	1.4	20	
Silver	0.0177	0.0010	0.02		89	70	130	0.01728	2.4	20	
Uranium	0.0581	0.00030	0.05	0.006593	103	70	130	0.05748	1.1	20	
Vanadium	0.0519	0.010	0.05	0.002296	99	70	130	0.05107	1.5	20	
Zinc	0.136	0.010	0.05	0.08461	103	70	130	0.133	2.4	20	

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 197** SampType: **Sample Matrix Spike** Lab ID: **H14030389-006BMS** Method: **E200.8**

Analysis Date: **03/29/14 00:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0629	0.030	0.05	0.0125	101	70	130				
Antimony	0.0497	0.0010	0.05	0.000056	99	70	130				
Arsenic	0.0522	0.0010	0.05	0.0001938	104	70	130				
Barium	0.224	0.050	0.05	0.179	89	70	130				
Beryllium	0.0507	0.0010	0.05		101	70	130				
Cadmium	0.0519	0.0010	0.05		104	70	130				
Chromium	0.0496	0.0050	0.05	0.0000674	99	70	130				
Cobalt	0.0541	0.0050	0.05	0.0001771	108	70	130				
Copper	0.0491	0.0050	0.05	0.0000876	98	70	130				
Iron	0.161	0.020	0.15	0.008213	102	70	130				
Lead	0.0508	0.0010	0.05	0.0000103	102	70	130				
Magnesium	26.1	1.0	1	24.99		70	130				A
Manganese	0.0510	0.0010	0.05	0.0007128	100	70	130				
Molybdenum	0.0494	0.0010	0.05	0.0004417	98	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 197** SampType: **Sample Matrix Spike** Lab ID: **H14030389-006BMS** Method: **E200.8**

Analysis Date: **03/29/14 00:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.0490	0.0050	0.05		98	70	130				
Selenium	0.0560	0.0010	0.05	0.000162	112	70	130				
Silver	0.0200	0.0010	0.02		100	70	130				
Uranium	0.0511	0.00030	0.05	0.0008379	101	70	130				
Vanadium	0.0492	0.010	0.05	0.0000931	98	70	130				
Zinc	0.0519	0.010	0.05	0.00154	101	70	130				

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 198** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030389-006BMSD** Method: **E200.8**

Analysis Date: **03/29/14 00:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0609	0.030	0.05	0.0125	97	70	130	0.06294	3.2	20	
Antimony	0.0496	0.0010	0.05	0.000056	99	70	130	0.04969	0.2	20	
Arsenic	0.0523	0.0010	0.05	0.0001938	104	70	130	0.05219	0.1	20	
Barium	0.223	0.050	0.05	0.179	88	70	130	0.2235	0.1	20	
Beryllium	0.0506	0.0010	0.05		101	70	130	0.05068	0.3	20	
Cadmium	0.0517	0.0010	0.05		103	70	130	0.0519	0.3	20	
Chromium	0.0494	0.0050	0.05	0.0000674	99	70	130	0.04961	0.5	20	
Cobalt	0.0518	0.0050	0.05	0.0001771	103	70	130	0.05413	4.4	20	
Copper	0.0486	0.0050	0.05	0.0000876	97	70	130	0.04906	1.0	20	
Iron	0.162	0.020	0.15	0.008213	102	70	130	0.1612	0.3	20	
Lead	0.0512	0.0010	0.05	0.0000103	102	70	130	0.05083	0.8	20	
Magnesium	26.0	1.0	1	24.99		70	130	26.09	0.5	20	A
Manganese	0.0509	0.0010	0.05	0.0007128	100	70	130	0.05096	0.2	20	
Molybdenum	0.0494	0.0010	0.05	0.0004417	98	70	130	0.04942	0.0	20	
Nickel	0.0490	0.0050	0.05		98	70	130	0.04899	0.0	20	
Selenium	0.0551	0.0010	0.05	0.000162	110	70	130	0.05604	1.7	20	
Silver	0.0198	0.0010	0.02		99	70	130	0.01999	0.8	20	
Uranium	0.0519	0.00030	0.05	0.0008379	102	70	130	0.05112	1.5	20	
Vanadium	0.0489	0.010	0.05	0.0000931	98	70	130	0.04917	0.6	20	
Zinc	0.0516	0.010	0.05	0.00154	100	70	130	0.05193	0.7	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 198** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030389-006BMSD** Method: **E200.8**

Analysis Date: **03/29/14 00:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Associated samples: **H14030374-001B; H14030374-002B; H14030374-003B; H14030374-004B; H14030374-005B; H14030374-006B; H14030374-007B; H14030374-008B; H14030374-009B; H14030374-010B; H14030374-011B; H14030374-012B; H14030374-013B; H14030374-014B; H14030374-015B; H14030374-016B; H14030374-017B; H14030374-018B**

Run ID :Run Order: **ICPMS204-B_140328B: 228** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/29/14 02:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.6	0.10	40		**94**	70	130				
Antimony	0.000123	0.050									
Arsenic	0.000162	0.0050									
Barium	0.000169	0.10									
Beryllium	-1.50E-05	0.0010									
Boron	0.000124	0.10									
Cadmium	0.000692	0.0010									
Calcium	110	0.50	120		**91**	70	130				
Chromium	0.00103	0.010									
Cobalt	0.000401	0.010									
Copper	0.000324	0.010									
Iron	99.2	0.020	100		**99**	70	130				
Lead	0.000234	0.010									
Magnesium	40.5	0.50	40		**101**	70	130				
Manganese	9.80E-05	0.010									
Molybdenum	0.732	0.0050	0.8		**91**	70	130				
Nickel	0.000254	0.010									
Potassium	40.1	0.50	40		**100**	70	130				
Selenium	0.000525	0.0050									
Silver	0.000215	0.0050									
Sodium	102	0.50	100		**102**	70	130				
Uranium	2.00E-06	0.0010									
Vanadium	8.00E-05	0.10									
Zinc	0.00165	0.010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 228** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **03/29/14 02:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Run ID :Run Order: **ICPMS204-B_140328B: 229** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/29/14 03:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.1	0.10	40		95	70	130				
Antimony	0.000194	0.050				0	0				
Arsenic	0.00994	0.0050	0.01		99	70	130				
Barium	0.000191	0.10				0	0				
Beryllium	-1.10E-05	0.0010				0	0				
Boron	0.000147	0.10				0	0				
Cadmium	0.0102	0.0010	0.01		102	70	130				
Calcium	107	0.50	120		89	70	130				
Chromium	0.0209	0.010	0.02		105	70	130				
Cobalt	0.0214	0.010	0.02		107	70	130				
Copper	0.0196	0.010	0.02		98	70	130				
Iron	99.2	0.020	100		99	70	130				
Lead	0.000247	0.010				0	0				
Magnesium	40.1	0.50	40		100	70	130				
Manganese	0.0218	0.010	0.02		109	70	130				
Molybdenum	0.729	0.0050	0.8		91	70	130				
Nickel	0.0200	0.010	0.02		100	70	130				
Potassium	39.0	0.50	40		98	70	130				
Selenium	0.0100	0.0050	0.01		100	70	130				
Silver	0.0189	0.0050	0.02		94	70	130				
Sodium	100	0.50	100		100	70	130				
Uranium	2.00E-06	0.0010				0	0				
Vanadium	0.0202	0.10	0.02		101	70	130				
Zinc	0.0112	0.010	0.01		112	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95901

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140328B: 229** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **03/29/14 03:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001B; H14030374-001C; H14030374-002B; H14030374-002C; H14030374-003B; H14030374-003C; H14030374-004B; H14030374-004C; H14030374-005B; H14030374-005C; H14030374-006B; H14030374-006C; H14030374-007B; H14030374-007C; H14030374-008B; H14030374-008C; H14030374-009B; H14030374-009C; H14030374-010B; H14030374-010C; H14030374-011B; H14030374-011C; H14030374-012B; H14030374-012C; H14030374-013B; H14030374-013C; H14030374-014B; H14030374-014C; H14030374-015B; H14030374-015C; H14030374-016B; H14030374-016C; H14030374-017B; H14030374-017C; H14030374-018B; H14030374-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95936

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140401B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **04/01/14 13:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.467	0.10	0.5		93	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-009A; H14030374-010A; H14030374-011A**

Run ID :Run Order: **FIA203-HE_140401B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **04/01/14 13:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0680	0.10				0	0				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-005A; H14030374-006A; H14030374-007A; H14030374-009A; H14030374-010A; H14030374-011A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95949

Date: *23-Apr-14*

Run ID :Run Order: **IC102-H_140401A: 13** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **04/01/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	99	1.0	100		99	90	110				
Sulfate	400	1.0	400		99	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 14** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **04/01/14 10:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.008									
Sulfate	ND	0.08									

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 15** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **04/01/14 11:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	50	1.0	50		100	90	110				
Sulfate	210	1.0	200		104	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 30** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV040114-1** Method: **E300.0**
Analysis Date: **04/01/14 13:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	430	1.0	400		108	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A**

Run ID :Run Order: **IC102-H_140401A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14030353-013AMS** Method: **E300.0**
Analysis Date: **04/01/14 14:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	1100	1.0	1000	22.4	108	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95949

Date: *23-Apr-14*

Run ID :Run Order: **IC102-H_140401A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14030353-013AMS** Method: **E300.0**
Analysis Date: **04/01/14 14:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	7300	2.3	4000	2932	108	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030353-013AMSD** Method: **E300.0**
Analysis Date: **04/01/14 14:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	1100	1.0	1000	22.4	105	90	110	1107	3.4	20	
Sulfate	7000	2.3	4000	2932	103	90	110	7267	3.0	20	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 44** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV040114-2** Method: **E300.0**
Analysis Date: **04/01/14 16:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	440	1.0	400		110	90	110				

Associated samples: **H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 47** SampType: **Sample Matrix Spike** Lab ID: **H14030374-015AMS** Method: **E300.0**
Analysis Date: **04/01/14 16:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	91	1.0	50	36.7	108	90	110				
Sulfate	300	1.0	200	76.26	110	90	110				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Run ID :Run Order: **IC102-H_140401A: 48** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-015AMSD** Method: **E300.0**
Analysis Date: **04/01/14 16:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	91	1.0	50	36.7	108	90	110	90.6	0.3	20	
Sulfate	300	1.0	200	76.26	110	90	110	296.6	0.2	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95949

Date: *23-Apr-14*

Run ID :Run Order: **IC102-H_140401A: 48** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030374-015AMSD** Method: **E300.0**

Analysis Date: **04/01/14 16:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-001A; H14030374-002A; H14030374-004A; H14030374-006A; H14030374-008A; H14030374-009A; H14030374-011A; H14030374-015A; H14030374-017A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95959

Date: *23-Apr-14*

Run ID :Run Order: **FIA202-HE_140402B: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**

Analysis Date: **04/02/14 09:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.230	0.010	0.25		92	90	110				

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Run ID :Run Order: **FIA202-HE_140402B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**

Analysis Date: **04/02/14 09:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0907	0.010	0.1		91	90	110				

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Run ID :Run Order: **FIA202-HE_140402B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**

Analysis Date: **04/02/14 09:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-0.00310	0.010				0	0				

Associated samples: **H14030374-006D; H14030374-007D; H14030374-008D; H14030374-009D; H14030374-010D; H14030374-011D; H14030374-012D; H14030374-013D; H14030374-014D; H14030374-015D**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95960

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140401B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **04/01/14 16:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.297	0.10	0.3		99	90	110				
Cadmium	0.0320	0.0010	0.03		107	90	110				
Cobalt	0.0618	0.010	0.06		103	90	110				
Magnesium	3.21	0.50	3		107	90	110				
Silver	0.0308	0.0050	0.03		103	90	110				
Zinc	0.0655	0.010	0.06		109	90	110				

Associated samples: **H14030374-004C; H14030374-005B; H14030374-012B; H14030374-012C; H14030374-013B**

Run ID :Run Order: **ICPMS204-B_140401B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **04/01/14 16:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.5	0.10	40		96	70	130				
Cadmium	0.000574	0.0010									
Cobalt	0.000301	0.010									
Magnesium	42.0	0.50	40		105	70	130				
Silver	0.000185	0.0050									
Zinc	0.00178	0.010									

Associated samples: **H14030374-004C; H14030374-005B; H14030374-012B; H14030374-012C; H14030374-013B**

Run ID :Run Order: **ICPMS204-B_140401B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **04/01/14 16:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.8	0.10	40		94	70	130				
Cadmium	0.00976	0.0010	0.01		98	70	130				
Cobalt	0.0210	0.010	0.02		105	70	130				
Magnesium	41.9	0.50	40		105	70	130				
Silver	0.0190	0.0050	0.02		95	70	130				
Zinc	0.0119	0.010	0.01		119	70	130				

Associated samples: **H14030374-004C; H14030374-005B; H14030374-012B; H14030374-012C; H14030374-013B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95960

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140401B: 20** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**
Analysis Date: **04/01/14 17:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	ND	2E-05									
Magnesium	ND	0.0006									
Zinc	ND	0.0003									

Associated samples: **H14030374-005B; H14030374-012B; H14030374-013B**

Run ID :Run Order: **ICPMS204-B_140401B: 21** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**
Analysis Date: **04/01/14 17:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.0513	0.010	0.05		**103**	85	115				
Magnesium	1.11	0.50	1		**111**	85	115				
Zinc	0.0562	0.010	0.05		**112**	85	115				

Associated samples: **H14030374-005B; H14030374-012B; H14030374-013B**

Run ID :Run Order: **ICPMS204-B_140401B: 28** SampType: **Sample Matrix Spike** Lab ID: **H14030371-003BMS** Method: **E200.8**
Analysis Date: **04/01/14 18:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.0506	0.0050	0.05	0.001782	**98**	70	130				
Magnesium	7.57	1.0	1	6.605		70	130				A
Zinc	0.0617	0.010	0.05	0.008977	**105**	70	130				

Associated samples: **H14030374-005B; H14030374-012B; H14030374-013B**

Run ID :Run Order: **ICPMS204-B_140401B: 29** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14030371-003BMSD** Method: **E200.8**
Analysis Date: **04/01/14 18:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.0510	0.0050	0.05	0.001782	**98**	70	130	0.0506	**0.7**	20	
Magnesium	7.54	1.0	1	6.605		70	130	7.572	**0.5**	20	A
Zinc	0.0616	0.010	0.05	0.008977	**105**	70	130	0.06171	**0.2**	20	

Associated samples: **H14030374-005B; H14030374-012B; H14030374-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R95960

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140401B: 181** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **04/02/14 05:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.4	0.10	40		96	70	130				
Cadmium	0.000420	0.0010									
Cobalt	0.000325	0.010									
Magnesium	43.5	0.50	40		109	70	130				
Silver	0.000157	0.0050									
Zinc	0.00149	0.010									

Associated samples: **H14030374-004C; H14030374-005B; H14030374-012B; H14030374-012C; H14030374-013B**

Run ID :Run Order: **ICPMS204-B_140401B: 182** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **04/02/14 05:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.9	0.10	40		95	70	130				
Cadmium	0.00941	0.0010	0.01		94	70	130				
Cobalt	0.0203	0.010	0.02		102	70	130				
Magnesium	43.2	0.50	40		108	70	130				
Silver	0.0193	0.0050	0.02		97	70	130				
Zinc	0.0106	0.010	0.01		106	70	130				

Associated samples: **H14030374-004C; H14030374-005B; H14030374-012B; H14030374-012C; H14030374-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96086

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/07/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.29	0.10	4		107	90	110				
Arsenic	0.840	0.0085	0.8		105	90	110				
Barium	0.848	0.10	0.8		106	90	110				
Beryllium	0.416	0.0010	0.4		104	90	110				
Boron	0.826	0.10	0.8		103	90	110				
Cadmium	0.404	0.0010	0.4		101	90	110				
Chromium	0.810	0.010	0.8		101	90	110				
Cobalt	0.810	0.010	0.8		101	90	110				
Copper	0.841	0.010	0.8		105	90	110				
Iron	4.08	0.020	4		102	90	110				
Lead	0.807	0.010	0.8		101	90	110				
Manganese	4.07	0.010	4		102	90	110				
Nickel	0.791	0.010	0.8		99	90	110				
Vanadium	0.829	0.10	0.8		104	90	110				
Zinc	0.822	0.010	0.8		103	90	110				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICP2-HE_140407B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/07/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	533	0.10	500		107	80	120				
Arsenic	0.00856	0.0085				0	0				
Barium	-0.000170	0.10				0	0				
Beryllium	7.00E-05	0.0010				0	0				
Boron	-0.00568	0.10				0	0				
Cadmium	-0.000880	0.0010				0	0				
Chromium	-0.000280	0.013				0	0				
Cobalt	-0.0143	0.010				0	0				
Copper	-0.00343	0.010				0	0				
Iron	186	0.020	200		93	80	120				
Lead	-0.0336	0.010				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96086

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140407B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/07/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	-0.0249	0.010				0	0				
Nickel	0.00534	0.010				0	0				
Vanadium	ND	0.10				0	0				
Zinc	-0.00145	0.010				0	0				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Run ID :Run Order: **ICP2-HE_140407B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/07/14 10:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 15	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	548	0.10	500		110	80	120				
Arsenic	1.01	0.0085	1		101	80	120				
Barium	0.536	0.10	0.5		107	80	120				
Beryllium	0.509	0.0010	0.5		102	80	120				
Boron	1.01	0.10	1		101	80	120				
Cadmium	0.941	0.0010	1		94	80	120				
Chromium	0.489	0.013	0.5		98	80	120				
Cobalt	0.467	0.010	0.5		93	80	120				
Copper	0.530	0.010	0.5		106	80	120				
Iron	191	0.020	200		96	80	120				
Lead	0.965	0.010	1		96	80	120				
Manganese	0.468	0.010	0.5		94	80	120				
Nickel	0.932	0.010	1		93	80	120				
Vanadium	0.494	0.10	0.5		99	80	120				
Zinc	1.03	0.010	1		103	80	120				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96095

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140407B: 27** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/07/14 12:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0598	0.0010	0.06		100	90	110				
Arsenic	0.0595	0.0010	0.06		99	90	110				
Cadmium	0.0316	0.0010	0.03		105	90	110				
Molybdenum	0.0580	0.0010	0.06		97	90	110				
Selenium	0.0605	0.0010	0.06		101	90	110				
Silver	0.0304	0.0010	0.03		101	90	110				
Uranium	0.0587	0.00030	0.06		98	90	110				

Associated samples: **H14030374-019A; H14030374-019B; H14030374-022A; H14030374-022B; H14030374-025A; H14030374-025B; H14030374-028A; H14030374-028B; H14030374-031A; H14030374-031B; H14030374-034A; H14030374-034B; H14030374-037A; H14030374-037B; H14030374-040A; H14030374-040B; H14030374-043A; H14030374-043B; H14030374-046A; H14030374-046B; H14030374-049A; H14030374-049B; H14030374-052A; H14030374-052B; H14030374-055A; H14030374-055B; H14030374-058A; H14030374-058B; H14030374-061A; H14030374-061B; H14030374-064A; H14030374-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96114

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/08/14 11:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.09	0.10	4		102	90	110				
Arsenic	0.782	0.0085	0.8		98	90	110				
Barium	0.819	0.10	0.8		102	90	110				
Beryllium	0.414	0.0010	0.4		104	90	110				
Boron	0.778	0.10	0.8		97	90	110				
Chromium	0.778	0.010	0.8		97	90	110				
Cobalt	0.791	0.010	0.8		99	90	110				
Copper	0.811	0.010	0.8		101	90	110				
Iron	4.03	0.020	4		101	90	110				
Lead	0.746	0.010	0.8		93	90	110				
Manganese	4.01	0.010	4		100	90	110				
Nickel	0.756	0.010	0.8		94	90	110				
Vanadium	0.821	0.10	0.8		103	90	110				
Zinc	0.766	0.010	0.8		96	90	110				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/08/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	514	0.10	500		103	80	120				
Arsenic	0.00151	0.0085				0	0				
Barium	0.000190	0.10				0	0				
Beryllium	2.00E-05	0.0010				0	0				
Boron	-0.0106	0.10				0	0				
Chromium	0.00642	0.010				0	0				
Cobalt	-0.00753	0.010				0	0				
Copper	0.00477	0.010				0	0				
Iron	189	0.020	200		94	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96114

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/08/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	-0.0123	0.010				0	0				
Manganese	-0.0257	0.010				0	0				
Nickel	0.00775	0.010				0	0				
Vanadium	0.000960	0.10				0	0				
Zinc	-0.00287	0.010				0	0				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140408C: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/08/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	524	0.10	500		105	80	120				
Arsenic	0.983	0.0085	1		98	80	120				
Barium	0.503	0.10	0.5		101	80	120				
Beryllium	0.503	0.0010	0.5		101	80	120				
Boron	0.989	0.10	1		99	80	120				
Chromium	0.484	0.010	0.5		97	80	120				
Cobalt	0.458	0.010	0.5		92	80	120				
Copper	0.507	0.010	0.5		101	80	120				
Iron	190	0.020	200		95	80	120				
Lead	0.906	0.010	1		91	80	120				
Manganese	0.465	0.010	0.5		93	80	120				
Nickel	0.924	0.010	1		92	80	120				
Vanadium	0.495	0.10	0.5		99	80	120				
Zinc	0.993	0.010	1		99	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96114

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140408C: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/08/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-020A; H14030374-020B; H14030374-021A; H14030374-021B; H14030374-023A; H14030374-023B; H14030374-024A; H14030374-024B; H14030374-026A; H14030374-026B; H14030374-027A; H14030374-027B; H14030374-029A; H14030374-029B; H14030374-030A; H14030374-030B; H14030374-032A; H14030374-032B; H14030374-033A; H14030374-033B; H14030374-035A; H14030374-035B; H14030374-036A; H14030374-036B; H14030374-038A; H14030374-038B; H14030374-039A; H14030374-039B; H14030374-041A; H14030374-041B; H14030374-042A; H14030374-042B; H14030374-044A; H14030374-044B; H14030374-045A; H14030374-045B; H14030374-047A; H14030374-047B; H14030374-048A; H14030374-048B; H14030374-050A; H14030374-050B; H14030374-051A; H14030374-051B; H14030374-053A; H14030374-053B; H14030374-054A; H14030374-054B; H14030374-056A; H14030374-056B; H14030374-057A; H14030374-057B; H14030374-059A; H14030374-059B; H14030374-060A; H14030374-060B; H14030374-062A; H14030374-062B; H14030374-063A; H14030374-063B; H14030374-065A; H14030374-065B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96127

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140408B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/08/14 17:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0604	0.050	0.06		101	90	110				
Arsenic	0.0602	0.0050	0.06		100	90	110				
Cadmium	0.0314	0.0010	0.03		105	90	110				
Lead	0.0622	0.010	0.06		104	90	110				
Molybdenum	0.0600	0.0050	0.06		100	90	110				
Selenium	0.0606	0.0050	0.06		101	90	110				
Silver	0.0310	0.0050	0.03		103	90	110				
Uranium	0.0619	0.0010	0.06		103	90	110				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96198

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411A: 31** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/10/14 18:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0606	0.0010	0.06		101	90	110				
Arsenic	0.0608	0.0010	0.06		101	90	110				
Barium	0.0618	0.0010	0.06		103	90	110				
Cadmium	0.0324	0.0010	0.03		108	90	110				
Lead	0.0629	0.0010	0.06		105	90	110				
Molybdenum	0.0602	0.0010	0.06		100	90	110				
Selenium	0.0614	0.0010	0.06		102	90	110				
Silver	0.0304	0.0010	0.03		101	90	110				
Uranium	0.0600	0.00030	0.06		100	90	110				
Zinc	0.0632	0.0010	0.06		105	90	110				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Run ID :Run Order: **ICPMS204-B_140411A: 92** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/10/14 23:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0632	0.0010	0.06		105	90	110				
Arsenic	0.0586	0.0010	0.06		98	90	110				
Barium	0.0606	0.0010	0.06		101	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Lead	0.0635	0.0010	0.06		106	90	110				
Molybdenum	0.0603	0.0010	0.06		100	90	110				
Selenium	0.0597	0.0010	0.06		100	90	110				
Silver	0.0305	0.0010	0.03		102	90	110				
Uranium	0.0586	0.00030	0.06		98	90	110				
Zinc	0.0610	0.0010	0.06		102	90	110				

Associated samples: **H14030374-020A; H14030374-020B; H14030374-023A; H14030374-023B; H14030374-026A; H14030374-026B; H14030374-029A; H14030374-029B; H14030374-032A; H14030374-032B; H14030374-035A; H14030374-035B; H14030374-038A; H14030374-038B; H14030374-041A; H14030374-041B; H14030374-044A; H14030374-044B; H14030374-047A; H14030374-047B; H14030374-050A; H14030374-050B; H14030374-053A; H14030374-053B; H14030374-056A; H14030374-056B; H14030374-059A; H14030374-059B; H14030374-062A; H14030374-062B; H14030374-065A; H14030374-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96211

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/11/14 09:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.840	0.0085	0.8		105	90	110				
Barium	0.801	0.10	0.8		100	90	110				
Chromium	0.841	0.010	0.8		105	90	110				
Copper	0.803	0.010	0.8		100	90	110				
Lead	0.806	0.010	0.8		101	90	110				
Manganese	3.98	0.010	4		99	90	110				
Vanadium	0.803	0.10	0.8		100	90	110				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/11/14 10:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.00100	0.0085				0	0				
Barium	0.000310	0.10				0	0				
Chromium	0.00749	0.010				0	0				
Copper	0.00209	0.010				0	0				
Lead	-0.00927	0.010				0	0				
Manganese	-0.000820	0.010				0	0				
Vanadium	0.00292	0.10				0	0				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140411A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/11/14 10:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.994	0.0085	1		99	80	120				
Barium	0.508	0.10	0.5		102	80	120				
Chromium	0.498	0.010	0.5		100	80	120				
Copper	0.524	0.010	0.5		105	80	120				
Lead	0.919	0.010	1		92	80	120				
Manganese	0.489	0.010	0.5		98	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96211

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140411A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/11/14 10:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	0.499	0.10	0.5		100	80	120				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-036A; H14030374-036B; H14030374-051A; H14030374-051B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96228

Date: *23-Apr-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 1** SampType: **Sample Duplicate** Lab ID: **H14030374-020BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	29.4	0.20						30.86			

Associated samples: **H14030374-019B; H14030374-020B; H14030374-021B; H14030374-022B; H14030374-023B; H14030374-024B; H14030374-025B; H14030374-026B; H14030374-027B; H14030374-028B; H14030374-029B; H14030374-030B; H14030374-031B; H14030374-032B; H14030374-033B; H14030374-034B; H14030374-035B; H14030374-036B; H14030374-037B; H14030374-038B; H14030374-039B; H14030374-040B; H14030374-041B; H14030374-042B; H14030374-043B; H14030374-044B; H14030374-045B; H14030374-046B; H14030374-047B; H14030374-048B; H14030374-049B; H14030374-050B; H14030374-051B; H14030374-052B; H14030374-053B; H14030374-054B; H14030374-055B; H14030374-056B; H14030374-057B; H14030374-058B; H14030374-059B; H14030374-060B; H14030374-061B; H14030374-062B; H14030374-063B; H14030374-064B; H14030374-065B; H14030374-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 2** SampType: **Sample Duplicate** Lab ID: **H14030374-030BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	38.4	0.20						39.82			

Associated samples: **H14030374-019B; H14030374-020B; H14030374-021B; H14030374-022B; H14030374-023B; H14030374-024B; H14030374-025B; H14030374-026B; H14030374-027B; H14030374-028B; H14030374-029B; H14030374-030B; H14030374-031B; H14030374-032B; H14030374-033B; H14030374-034B; H14030374-035B; H14030374-036B; H14030374-037B; H14030374-038B; H14030374-039B; H14030374-040B; H14030374-041B; H14030374-042B; H14030374-043B; H14030374-044B; H14030374-045B; H14030374-046B; H14030374-047B; H14030374-048B; H14030374-049B; H14030374-050B; H14030374-051B; H14030374-052B; H14030374-053B; H14030374-054B; H14030374-055B; H14030374-056B; H14030374-057B; H14030374-058B; H14030374-059B; H14030374-060B; H14030374-061B; H14030374-062B; H14030374-063B; H14030374-064B; H14030374-065B; H14030374-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 3** SampType: **Sample Duplicate** Lab ID: **H14030374-041BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	20.4	0.20						20.42			

Associated samples: **H14030374-019B; H14030374-020B; H14030374-021B; H14030374-022B; H14030374-023B; H14030374-024B; H14030374-025B; H14030374-026B; H14030374-027B; H14030374-028B; H14030374-029B; H14030374-030B; H14030374-031B; H14030374-032B; H14030374-033B; H14030374-034B; H14030374-035B; H14030374-036B; H14030374-037B; H14030374-038B; H14030374-039B; H14030374-040B; H14030374-041B; H14030374-042B; H14030374-043B; H14030374-044B; H14030374-045B; H14030374-046B; H14030374-047B; H14030374-048B; H14030374-049B; H14030374-050B; H14030374-051B; H14030374-052B; H14030374-053B; H14030374-054B; H14030374-055B; H14030374-056B; H14030374-057B; H14030374-058B; H14030374-059B; H14030374-060B; H14030374-061B; H14030374-062B; H14030374-063B; H14030374-064B; H14030374-065B; H14030374-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 4** SampType: **Sample Duplicate** Lab ID: **H14030374-050BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	22.0	0.20						21.06			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96228

Date: *23-Apr-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 4** SampType: **Sample Duplicate** Lab ID: **H14030374-050BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14030374-019B; H14030374-020B; H14030374-021B; H14030374-022B; H14030374-023B; H14030374-024B; H14030374-025B; H14030374-026B; H14030374-027B; H14030374-028B; H14030374-029B; H14030374-030B; H14030374-031B; H14030374-032B; H14030374-033B; H14030374-034B; H14030374-035B; H14030374-036B; H14030374-037B; H14030374-038B; H14030374-039B; H14030374-040B; H14030374-041B; H14030374-042B;** H14030374-043B; H14030374-044B; H14030374-045B; H14030374-046B; H14030374-047B; H14030374-048B; H14030374-049B; H14030374-050B; H14030374-051B; H14030374-052B; H14030374-053B; H14030374-054B; H14030374-055B; H14030374-056B; H14030374-057B; H14030374-058B; H14030374-059B; H14030374-060B; H14030374-061B; H14030374-062B; H14030374-063B; H14030374-064B; H14030374-065B; H14030374-066B

Run ID :Run Order: **SOIL DRYING OVEN 2_140404A: 5** SampType: **Sample Duplicate** Lab ID: **H14030374-060BDUP** Method: **D2974**

Analysis Date: **04/14/14 10:45** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	19.1	0.20						20.42			

Associated samples: H14030374-019B; H14030374-020B; H14030374-021B; H14030374-022B; H14030374-023B; H14030374-024B; H14030374-025B; H14030374-026B; **H14030374-027B; H14030374-028B; H14030374-029B; H14030374-030B; H14030374-031B; H14030374-032B; H14030374-033B; H14030374-034B;** H14030374-035B; H14030374-036B; H14030374-037B; H14030374-038B; H14030374-039B; H14030374-040B; H14030374-041B; H14030374-042B; H14030374-043B; H14030374-044B; H14030374-045B; H14030374-046B; H14030374-047B; H14030374-048B; H14030374-049B; H14030374-050B; H14030374-051B; H14030374-052B; H14030374-053B; H14030374-054B; H14030374-055B; H14030374-056B; H14030374-057B; H14030374-058B; H14030374-059B; H14030374-060B; H14030374-061B; H14030374-062B; H14030374-063B; H14030374-064B; H14030374-065B; H14030374-066B

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96229

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140411C: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/11/14 17:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	0.0607	0.00030	0.06		101	90	110				

Associated samples: **H14030374-065A; H14030374-065B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96331

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **04/16/14 16:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.04	0.10	4		101	90	110				
Barium	0.809	0.10	0.8		101	90	110				
Boron	0.758	0.10	0.8		95	90	110				
Copper	0.799	0.010	0.8		100	90	110				
Iron	3.95	0.020	4		99	90	110				
Lead	0.777	0.010	0.8		97	90	110				
Manganese	3.99	0.010	4		100	90	110				
Vanadium	0.798	0.10	0.8		100	90	110				
Zinc	0.776	0.010	0.8		97	90	110				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Run ID :Run Order: **ICP2-HE_140416D: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **04/16/14 17:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	523	0.10	500		105	80	120				
Barium	-0.000280	0.10				0	0				
Boron	-0.00931	0.10				0	0				
Copper	0.00192	0.010				0	0				
Iron	187	0.020	200		94	80	120				
Lead	-0.0252	0.010				0	0				
Manganese	9.00E-05	0.010				0	0				
Vanadium	0.000700	0.10				0	0				
Zinc	-0.00249	0.010				0	0				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96331

Date: *23-Apr-14*

Run ID :Run Order: **ICP2-HE_140416D: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **04/16/14 17:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	512	0.10	500		102	80	120				
Barium	0.506	0.10	0.5		101	80	120				
Boron	0.959	0.10	1		96	80	120				
Copper	0.512	0.010	0.5		102	80	120				
Iron	184	0.020	200		92	80	120				
Lead	0.874	0.010	1		87	80	120				
Manganese	0.479	0.010	0.5		96	80	120				
Vanadium	0.482	0.10	0.5		96	80	120				
Zinc	0.978	0.010	1		98	80	120				

Associated samples: **H14030374-021A; H14030374-021B; H14030374-024A; H14030374-024B; H14030374-027A; H14030374-027B; H14030374-030A; H14030374-030B; H14030374-033A; H14030374-033B; H14030374-036A; H14030374-036B; H14030374-039A; H14030374-039B; H14030374-042A; H14030374-042B; H14030374-045A; H14030374-045B; H14030374-048A; H14030374-048B; H14030374-051A; H14030374-051B; H14030374-054A; H14030374-054B; H14030374-057A; H14030374-057B; H14030374-060A; H14030374-060B; H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96358

Date: *23-Apr-14*

Run ID :Run Order: **ICPMS204-B_140417A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **04/17/14 10:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0592	0.0010	0.06		99	90	110				
Cadmium	0.0316	0.0010	0.03		105	90	110				
Molybdenum	0.0593	0.0010	0.06		99	90	110				
Selenium	0.0608	0.0010	0.06		101	90	110				
Silver	0.0308	0.0010	0.03		103	90	110				
Uranium	0.0599	0.00030	0.06		100	90	110				

Associated samples: **H14030374-063A; H14030374-063B; H14030374-066A; H14030374-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R96433

Date: *23-Apr-14*

Run ID :Run Order: **FIA203-HE_140421B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **04/21/14 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.528	0.10	0.5		106	90	110				

Associated samples: **H14030374-003A**

Run ID :Run Order: **FIA203-HE_140421B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **04/21/14 12:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.0174	0.10				0	0				

Associated samples: **H14030374-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140328A

Date: *23-Apr-14*

Run ID :Run Order: **ACCU-124 (14410200)_140328A: 2** SampType: **Method Blank** Lab ID: **MB-25_140328A** Method: **A2540 D**

Analysis Date: **03/28/14 12:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **ACCU-124 (14410200)_140328A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-26_140328A** Method: **A2540 D**

Analysis Date: **03/28/14 12:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	100.0	10	100		100	80	120				

Associated samples: **H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **ACCU-124 (14410200)_140328A: 2** SampType: **Sample Duplicate** Lab ID: **H14030374-007A DUP** Method: **A2540 D**

Analysis Date: **03/28/14 12:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	9.00	10						9		5	

Associated samples: **H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Run ID :Run Order: **ACCU-124 (14410200)_140328A: 3** SampType: **Sample Duplicate** Lab ID: **H14030374-017A DUP** Method: **A2540 D**

Analysis Date: **03/28/14 12:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	14.0	10						4		5	

Associated samples: **H14030374-007A; H14030374-008A; H14030374-009A; H14030374-010A; H14030374-011A; H14030374-012A; H14030374-013A; H14030374-014A; H14030374-015A; H14030374-016A; H14030374-017A; H14030374-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14030374
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140331A

Date: *23-Apr-14*

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 1** SampType: **Method Blank** Lab ID: **MB-1_140331A** Method: **A2540 D**
Analysis Date: **03/31/14 10:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A**

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 3** SampType: **Sample Duplicate** Lab ID: **H14030321-001B DUP** Method: **A2540 D**
Analysis Date: **03/31/14 10:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	10								5	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A**

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_140331A** Method: **A2540 D**
Analysis Date: **03/31/14 10:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	80.0	10	100		**80**	80	120				

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A**

Run ID :Run Order: **ACCU-124 (14410200)_140331A: 1** SampType: **Sample Duplicate** Lab ID: **H14030368-002B DUP** Method: **A2540 D**
Analysis Date: **03/31/14 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	137	10						133.3	**2.5**	5	

Associated samples: **H14030374-001A; H14030374-002A; H14030374-003A; H14030374-004A; H14030374-005A; H14030374-006A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

MT DEQ-Federal Superfund

H14030374

Login completed by: Tracy L. Lorash

Date Received: 3/26/2014

Reviewed by: BL2000\sdull

Received by: wjj

Reviewed Date: 4/3/2014

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample ID on COC is Field Duplicate #2 (SS-08) -ID on bottles is Field Duplicate #2. Logged in with ID from COC.
Sample ID on COC is SS-10A Duplicate #1 -ID on sediment jar is SS-10A Duplicate 1. Logged in with ID from COC.
Sample ID on COC is SS-10A Duplicate #2 -ID on sediment jar is SS-10A Duplicate 2. Logged in with ID from COC.
Sample ID on COC is Field Duplicate #1 (SS-13) -ID on bottles is Field Duplicate #1. Logged in with ID from COC.
Collection date and time on SS-16B unpreserved label is smudged and unreadable.
Collection time on SS-17D non-filtered metals label is smudged and unreadable and the collection date and time on unpreserved and sulfuric labels is smudged and unreadable.
Collection time on SS-19 sediment label is smudged and unreadable.
Collection time on SS-11D label is smudged.
Collection time on SS-11C label is smudged and unreadable and the date is smudged.
Relinquished time by client does not match the time samples were received by the laboratory.
Per client request, the temperature for cooler 1 was taken using a client sample.

Workorder Receipt Checklist - Continued

MT DEQ-Federal Superfund H14030374

Cooler 1 was received at 1.3℃, Cooler 2 at 1.3℃, Cooler 3 at 7.0℃, Cooler 4 at 5.0℃. Samples in coolers 1 & 2 were received on wet ice and samples in coolers 3 & 4 were not received on ice. TI 3/27/14

APPENDIX B2

ANALYTICAL LABORATORY RESULTS
2ND QUARTER MONITORING

ANALYTICAL SUMMARY REPORT

July 08, 2014

Natural Resource Damage Program
1301 E Lockey
Helena, MT 59620-1425

Work Order: H14060105 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 14 samples for Natural Resource Damage Program on 6/4/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14060105-001	Field Blank #2	06/03/14 17:15	06/04/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14060105-002	SS-01	06/03/14 17:45	06/04/14	Aqueous	Same As Above
H14060105-003	Field Duplicate #2 (SS-01)	06/03/14 17:45	06/04/14	Aqueous	Same As Above
H14060105-004	SS-05A	06/03/14 16:00	06/04/14	Aqueous	Same As Above
H14060105-005	SS-15G	06/02/14 13:15	06/04/14	Aqueous	Same As Above
H14060105-006	SS-01 Sediment Sieve <0.065mm	06/03/14 17:45	06/04/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14060105-007	SS-01 Sediment Sieve 0.065-1mm	06/03/14 17:45	06/04/14	Sediment	Same As Above
H14060105-008	SS-01 Sediment Sieve 1-2mm	06/03/14 17:45	06/04/14	Sediment	Same As Above
H14060105-009	SS-05A Sediment Sieve <0.065mm	06/03/14 16:00	06/04/14	Sediment	Same As Above
H14060105-010	SS-05A Sediment Sieve 0.065-1mm	06/03/14 16:00	06/04/14	Sediment	Same As Above
H14060105-011	SS-05A Sediment Sieve 1-2mm	06/03/14 16:00	06/04/14	Sediment	Same As Above
H14060105-012	SS-15G Sediment Sieve <0.065mm	06/02/14 13:15	06/04/14	Sediment	Same As Above
H14060105-013	SS-15G Sediment Sieve 0.065-1mm	06/02/14 13:15	06/04/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14060105-014	SS-15G Sediment Sieve 1-2mm	06/02/14 13:15	06/04/14	Sediment	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

CLIENT: Natural Resource Damage Program
Project: Silver Bow Creek Monitoring
Work Order: H14060105

Report Date: 07/08/14

CASE NARRATIVE

For this workorder, there were several samples, where at least one Dissolved metal was higher than the corresponding Total / Total Recoverable metal. These results were all confirmed by re-analysis or duplicate analysis. Abb 7/8/14

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Blank #2
Lab ID: H14060105-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	06/05/14 08:58 / blm		-124 (14410200)_140605A	7	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	06/05/14 13:39 / SR		PHSC_101-H_140605A	88	R97712
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	06/05/14 13:39 / SR		PHSC_101-H_140605A	88	R97712
Chloride	ND	mg/L		1		E300.0	06/05/14 16:14 / SR		IC102-H_140605A	21	R97753
Sulfate	ND	mg/L		1		E300.0	06/05/14 16:14 / SR		IC102-H_140605A	21	R97753
Hardness as CaCO3	ND	mg/L		1		A2340 B	06/05/14 15:40 / abb		CALC_140606A	696	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:01 / cm		FIA203-HE_140606E	19	R97804
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	06/05/14 12:51 / cm		FIA203-HE_140605B	49	R97740
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	06/09/14 12:59 / cm	06/09/14 09:37	FIA203-HE_140609B	22	24860
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	06/06/14 10:55 / cm	06/06/14 09:54	FIA202-HE_140606A	17	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Arsenic	ND	mg/L		0.001		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Barium	0.006	mg/L		0.003		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Boron	ND	mg/L		0.1		E200.7	06/05/14 15:40 / sld		ICP2-HE_140605C	36	R97754
Cadmium	ND	mg/L		0.00003		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Copper	ND	mg/L		0.001		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Iron	ND	mg/L		0.02		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Lead	ND	mg/L		0.0003		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Manganese	ND	mg/L		0.001		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 12:14 / sbk	06/09/14 08:04	HGCV202-H_140610A	12	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Nickel	ND	mg/L		0.002		E200.8	06/11/14 05:10 / dck		ICPMS204-B_140610B	61	R97907

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Blank #2
Lab ID: H14060105-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	ND	mg/L		1		E200.7	06/05/14 15:40 / sld		ICP2-HE_140605C	36	R97754
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Sodium	ND	mg/L		1		E200.7	06/05/14 15:40 / sld		ICP2-HE_140605C	36	R97754
Uranium	ND	mg/L		0.0002		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
Zinc	0.021	mg/L		0.008		E200.8	06/10/14 01:10 / dck		ICPMS204-B_140609A	181	R97879
-Barium and Zinc were confirmed by duplicate analysis.											
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Arsenic	ND	mg/L		0.001		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Barium	ND	mg/L		0.003		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Boron	ND	mg/L		0.1		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Cadmium	ND	mg/L		0.00003		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Calcium	ND	mg/L		1		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Copper	ND	mg/L		0.001		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Iron	ND	mg/L		0.02		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Lead	ND	mg/L		0.0003		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Magnesium	ND	mg/L		1		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Manganese	ND	mg/L		0.001		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 12:18 / sbk	06/09/14 08:04	HGCV202-H_140610A	13	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Nickel	ND	mg/L		0.002		E200.8	06/11/14 05:15 / dck	06/05/14 09:20	ICPMS204-B_140610B	62	24813
Potassium	ND	mg/L		1		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Sodium	ND	mg/L		1		E200.7	06/06/14 14:45 / sld	06/05/14 09:20	ICP2-HE_140606C	18	24813
Uranium	ND	mg/L		0.0002		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Blank #2
Lab ID: H14060105-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813
Zinc	ND	mg/L		0.008		E200.8	06/10/14 01:14 / dck	06/05/14 09:20	ICPMS204-B_140609A	182	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14060105-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	8	mg/L		1		A2540 D	06/05/14 08:58 / blm		-124 (14410200)_140605A	8	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	66	mg/L		4		A2320 B	06/05/14 13:44 / SR		PHSC_101-H_140605A	90	R97712
Bicarbonate as HCO3	79	mg/L		4		A2320 B	06/05/14 13:44 / SR		PHSC_101-H_140605A	90	R97712
Chloride	5	mg/L		1		E300.0	06/05/14 16:25 / SR		IC102-H_140605A	22	R97753
Sulfate	14	mg/L		1		E300.0	06/05/14 16:25 / SR		IC102-H_140605A	22	R97753
Hardness as CaCO3	72	mg/L		1		A2340 B	06/05/14 15:44 / abb		CALC_140606A	707	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:05 / cm		FIA203-HE_140606E	22	R97804
Nitrogen, Nitrate+Nitrite as N	0.12	mg/L		0.05		E353.2	06/05/14 12:52 / cm		FIA203-HE_140605B	50	R97740
Nitrogen, Total	0.50	mg/L		0.05		A4500 N-C	06/09/14 13:02 / cm	06/09/14 09:37	FIA203-HE_140609B	25	24860
Phosphorus, Total as P	0.115	mg/L		0.005		E365.1	06/06/14 10:59 / cm	06/06/14 09:54	FIA202-HE_140606A	20	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Arsenic	0.008	mg/L		0.001		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Barium	0.034	mg/L		0.003		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Boron	ND	mg/L		0.1		E200.7	06/05/14 15:44 / sld		ICP2-HE_140605C	37	R97754
Cadmium	ND	mg/L		0.00003		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Copper	0.006	mg/L		0.001		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Iron	0.34	mg/L		0.02		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Lead	ND	mg/L		0.0003		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Manganese	0.028	mg/L		0.001		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 12:22 / sbk	06/09/14 08:04	HGCV202-H_140610A	14	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Nickel	ND	mg/L		0.002		E200.8	06/11/14 05:19 / dck		ICPMS204-B_140610B	63	R97907

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14060105-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 15:44 / sld		ICP2-HE_140605C	37	R97754
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Sodium	7	mg/L		1		E200.7	06/05/14 15:44 / sld		ICP2-HE_140605C	37	R97754
Uranium	0.0012	mg/L		0.0002		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
Zinc	ND	mg/L		0.008		E200.8	06/10/14 01:18 / dck		ICPMS204-B_140609A	183	R97879
METALS, TOTAL RECOVERABLE											
Aluminum	0.219	mg/L		0.009		E200.7	06/06/14 14:56 / sld	06/05/14 09:20	ICP2-HE_140606C	21	24813
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Arsenic	0.009	mg/L		0.001		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Barium	0.028	mg/L		0.003		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Boron	ND	mg/L		0.1		E200.7	06/06/14 14:56 / sld	06/05/14 09:20	ICP2-HE_140606C	21	24813
Cadmium	0.00005	mg/L		0.00003		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Calcium	22	mg/L		1		E200.7	06/06/14 14:56 / sld	06/05/14 09:20	ICP2-HE_140606C	21	24813
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Copper	0.009	mg/L		0.001		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Iron	0.86	mg/L		0.02		E200.7	06/06/14 14:56 / sld	06/05/14 09:20	ICP2-HE_140606C	21	24813
Lead	0.0008	mg/L		0.0003		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Magnesium	6	mg/L		1		E200.7	06/06/14 14:56 / sld	06/05/14 09:20	ICP2-HE_140606C	21	24813
Manganese	0.059	mg/L		0.001		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Mercury	8.6E-06	mg/L		5E-06		E245.1	06/10/14 12:26 / sbk	06/09/14 08:04	HGCV202-H_140610A	15	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Nickel	ND	mg/L		0.002		E200.8	06/11/14 05:46 / dck	06/05/14 09:20	ICPMS204-B_140610B	69	24813
Potassium	2	mg/L		1		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Sodium	8	mg/L		1		E200.7	06/06/14 14:56 / sld	06/05/14 09:20	ICP2-HE_140606C	21	24813
Uranium	0.0013	mg/L		0.0002		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14060105-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813
Zinc	ND	mg/L		0.008		E200.8	06/10/14 01:23 / dck	06/05/14 09:20	ICPMS204-B_140609A	184	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Duplicate #2 (SS-01)
Lab ID: H14060105-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	5	mg/L		1		A2540 D	06/05/14 08:59 / blm		-124 (14410200)_140605A	9	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	66	mg/L		4		A2320 B	06/05/14 13:49 / SR		PHSC_101-H_140605A	92	R97712
Bicarbonate as HCO3	79	mg/L		4		A2320 B	06/05/14 13:49 / SR		PHSC_101-H_140605A	92	R97712
Chloride	5	mg/L		1		E300.0	06/05/14 16:36 / SR		IC102-H_140605A	23	R97753
Sulfate	14	mg/L		1		E300.0	06/05/14 16:36 / SR		IC102-H_140605A	23	R97753
Hardness as CaCO3	79	mg/L		1		A2340 B	06/11/14 12:03 / sld		WATERCALC_140611B	2	R97912
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:08 / cm		FIA203-HE_140606E	25	R97804
Nitrogen, Nitrate+Nitrite as N	0.12	mg/L		0.05		E353.2	06/05/14 12:53 / cm		FIA203-HE_140605B	51	R97740
Nitrogen, Total	0.54	mg/L		0.05		A4500 N-C	06/09/14 13:04 / cm	06/09/14 09:37	FIA203-HE_140609B	26	24860
Phosphorus, Total as P	0.109	mg/L		0.005		E365.1	06/06/14 11:00 / cm	06/06/14 09:54	FIA202-HE_140606A	21	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Arsenic	0.008	mg/L		0.001		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Barium	0.032	mg/L		0.003		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Boron	ND	mg/L		0.1		E200.7	06/05/14 15:48 / sld		ICP2-HE_140605C	38	R97754
Cadmium	ND	mg/L		0.00003		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Copper	0.006	mg/L		0.001		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Iron	0.32	mg/L		0.02		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Lead	ND	mg/L		0.0003		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Manganese	0.028	mg/L		0.001		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 12:31 / sbk	06/09/14 08:04	HGCV202-H_140610A	16	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Nickel	ND	mg/L		0.002		E200.8	06/11/14 05:51 / dck		ICPMS204-B_140610B	70	R97907

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Duplicate #2 (SS-01)
Lab ID: H14060105-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 15:48 / sld		ICP2-HE_140605C	38	R97754
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Sodium	8	mg/L		1		E200.7	06/05/14 15:48 / sld		ICP2-HE_140605C	38	R97754
Uranium	0.0012	mg/L		0.0002		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
Zinc	0.010	mg/L		0.008		E200.8	06/10/14 01:41 / dck		ICPMS204-B_140609A	188	R97879
METALS, TOTAL RECOVERABLE											
Aluminum	0.192	mg/L		0.009		E200.7	06/06/14 15:00 / sld	06/05/14 09:20	ICP2-HE_140606C	22	24813
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Arsenic	0.009	mg/L		0.001		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Barium	0.029	mg/L		0.003		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Boron	ND	mg/L		0.1		E200.7	06/06/14 15:00 / sld	06/05/14 09:20	ICP2-HE_140606C	22	24813
Cadmium	0.00005	mg/L		0.00003		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Calcium	22	mg/L		1		E200.7	06/06/14 15:00 / sld	06/05/14 09:20	ICP2-HE_140606C	22	24813
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Copper	0.015	mg/L		0.001		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Iron	0.86	mg/L		0.02		E200.7	06/06/14 15:00 / sld	06/05/14 09:20	ICP2-HE_140606C	22	24813
Lead	0.0008	mg/L		0.0003		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Magnesium	6	mg/L		1		E200.7	06/06/14 15:00 / sld	06/05/14 09:20	ICP2-HE_140606C	22	24813
Manganese	0.061	mg/L		0.001		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Mercury	8.0E-06	mg/L		5E-06		E245.1	06/10/14 12:35 / sbk	06/09/14 08:04	HGCV202-H_140610A	17	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Nickel	0.010	mg/L		0.002		E200.8	06/11/14 05:55 / dck	06/05/14 09:20	ICPMS204-B_140610B	71	24813
Potassium	2	mg/L		1		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Sodium	8	mg/L		1		E200.7	06/06/14 15:00 / sld	06/05/14 09:20	ICP2-HE_140606C	22	24813
Uranium	0.0013	mg/L		0.0002		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Duplicate #2 (SS-01)
Lab ID: H14060105-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813
Zinc	0.009	mg/L		0.008		E200.8	06/10/14 01:45 / dck	06/05/14 09:20	ICPMS204-B_140609A	189	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14060105-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	18	mg/L		1		A2540 D	06/05/14 09:00 / blm		I24 (14410200)_140605A	10	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	71	mg/L		4		A2320 B	06/05/14 13:54 / SR		PHSC_101-H_140605A	94	R97712
Bicarbonate as HCO3	80	mg/L		4		A2320 B	06/05/14 13:54 / SR		PHSC_101-H_140605A	94	R97712
Chloride	8	mg/L		1		E300.0	06/05/14 16:48 / SR		IC102-H_140605A	24	R97753
Sulfate	16	mg/L		1		E300.0	06/05/14 16:48 / SR		IC102-H_140605A	24	R97753
Hardness as CaCO3	80	mg/L		1		A2340 B	06/05/14 15:52 / abb		CALC_140606A	718	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:12 / cm		FIA203-HE_140606E	28	R97804
Nitrogen, Nitrate+Nitrite as N	0.15	mg/L		0.05		E353.2	06/05/14 12:55 / cm		FIA203-HE_140605B	52	R97740
Nitrogen, Total	0.73	mg/L		0.05		A4500 N-C	06/09/14 13:05 / cm	06/09/14 09:37	FIA203-HE_140609B	27	24860
Phosphorus, Total as P	0.139	mg/L		0.005		E365.1	06/06/14 11:01 / cm	06/06/14 09:54	FIA202-HE_140606A	22	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Arsenic	0.008	mg/L		0.001		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Barium	0.031	mg/L		0.003		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Boron	ND	mg/L		0.1		E200.7	06/05/14 15:52 / sld		ICP2-HE_140605C	39	R97754
Cadmium	ND	mg/L		0.00003		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Copper	0.007	mg/L		0.001		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Iron	0.28	mg/L		0.02		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Lead	0.0004	mg/L		0.0003		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Manganese	0.043	mg/L		0.001		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 12:47 / sbk	06/09/14 08:04	HGCV202-H_140610A	20	24850
Molybdenum	0.005	mg/L		0.005		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Nickel	ND	mg/L		0.002		E200.8	06/11/14 06:00 / dck		ICPMS204-B_140610B	72	R97907

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14060105-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 15:52 / sld		ICP2-HE_140605C	39	R97754
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Sodium	9	mg/L		1		E200.7	06/05/14 15:52 / sld		ICP2-HE_140605C	39	R97754
Uranium	0.0019	mg/L		0.0002		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
Zinc	ND	mg/L		0.008		E200.8	06/10/14 01:49 / dck		ICPMS204-B_140609A	190	R97879
METALS, TOTAL RECOVERABLE											
Aluminum	0.341	mg/L		0.009		E200.7	06/06/14 15:04 / sld	06/05/14 09:20	ICP2-HE_140606C	23	24813
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Arsenic	0.011	mg/L		0.001		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Barium	0.035	mg/L		0.003		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Boron	ND	mg/L		0.1		E200.7	06/06/14 15:04 / sld	06/05/14 09:20	ICP2-HE_140606C	23	24813
Cadmium	0.00012	mg/L		0.00003		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Calcium	25	mg/L		1		E200.7	06/06/14 15:04 / sld	06/05/14 09:20	ICP2-HE_140606C	23	24813
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Copper	0.024	mg/L		0.001		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Iron	1.02	mg/L		0.02		E200.7	06/06/14 15:04 / sld	06/05/14 09:20	ICP2-HE_140606C	23	24813
Lead	0.0045	mg/L		0.0003		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Magnesium	7	mg/L		1		E200.7	06/06/14 15:04 / sld	06/05/14 09:20	ICP2-HE_140606C	23	24813
Manganese	0.092	mg/L		0.001		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Mercury	0.000029	mg/L		5E-06		E245.1	06/10/14 12:52 / sbk	06/09/14 08:04	HGCV202-H_140610A	21	24850
Molybdenum	0.005	mg/L		0.005		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Nickel	ND	mg/L		0.002		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Potassium	3	mg/L		1		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Sodium	9	mg/L		1		E200.7	06/06/14 15:04 / sld	06/05/14 09:20	ICP2-HE_140606C	23	24813
Uranium	0.0021	mg/L		0.0002		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14060105-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813
Zinc	0.024	mg/L		0.008		E200.8	06/10/14 01:54 / dck	06/05/14 09:20	ICPMS204-B_140609A	191	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14060105-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	8	mg/L		1		A2540 D	06/05/14 09:01 / blm		I24 (14410200)_140605A	12	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	68	mg/L		4		A2320 B	06/05/14 14:00 / SR		PHSC_101-H_140605A	96	R97712
Bicarbonate as HCO3	83	mg/L		4		A2320 B	06/05/14 14:00 / SR		PHSC_101-H_140605A	96	R97712
Chloride	ND	mg/L		1		E300.0	06/05/14 16:59 / SR		IC102-H_140605A	25	R97753
Sulfate	19	mg/L		1		E300.0	06/05/14 16:59 / SR		IC102-H_140605A	25	R97753
Hardness as CaCO3	87	mg/L		1		A2340 B	06/11/14 12:03 / sld		WATERCALC_140611B	3	R97912
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:13 / cm		FIA203-HE_140606E	29	R97804
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	06/05/14 12:56 / cm		FIA203-HE_140605B	53	R97740
Nitrogen, Total	0.22	mg/L		0.05		A4500 N-C	06/09/14 13:06 / cm	06/09/14 09:37	FIA203-HE_140609B	28	24860
Phosphorus, Total as P	0.022	mg/L		0.005		E365.1	06/06/14 11:02 / cm	06/06/14 09:54	FIA202-HE_140606A	23	24831
METALS, DISSOLVED											
Aluminum	0.013	mg/L		0.009		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Arsenic	0.004	mg/L		0.001		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Barium	0.040	mg/L		0.003		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Boron	ND	mg/L		0.1		E200.7	06/05/14 15:55 / sld		ICP2-HE_140605C	40	R97754
Cadmium	ND	mg/L		0.00003		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Chromium	ND	mg/L		0.01		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Copper	0.002	mg/L		0.001		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Iron	ND	mg/L		0.02		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Lead	ND	mg/L		0.0003		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Manganese	0.002	mg/L		0.001		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Mercury	5.2E-06	mg/L		5E-06		E245.1	06/10/14 12:56 / sbk	06/09/14 08:04	HGCV202-H_140610A	22	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Nickel	ND	mg/L		0.002		E200.8	06/11/14 06:04 / dck		ICPMS204-B_140610B	73	R97907

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14060105-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	ND	mg/L		1		E200.7	06/05/14 15:55 / sld		ICP2-HE_140605C	40	R97754
Selenium	ND	mg/L		0.001		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Silver	ND	mg/L		0.0002		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Sodium	3	mg/L		1		E200.7	06/05/14 15:55 / sld		ICP2-HE_140605C	40	R97754
Uranium	0.0003	mg/L		0.0002		E200.8	06/11/14 06:04 / dck		ICPMS204-B_140610B	73	R97907
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
Zinc	0.019	mg/L		0.008		E200.8	06/10/14 01:58 / dck		ICPMS204-B_140609A	192	R97879
METALS, TOTAL RECOVERABLE											
Aluminum	0.325	mg/L		0.009		E200.7	06/06/14 15:07 / sld	06/05/14 09:20	ICP2-HE_140606C	24	24813
Antimony	ND	mg/L		0.0005		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Arsenic	0.004	mg/L		0.001		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Barium	0.018	mg/L		0.003		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Beryllium	ND	mg/L		0.0008		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Boron	ND	mg/L		0.1		E200.7	06/06/14 15:07 / sld	06/05/14 09:20	ICP2-HE_140606C	24	24813
Cadmium	0.00004	mg/L		0.00003		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Calcium	28	mg/L		1		E200.7	06/06/14 15:07 / sld	06/05/14 09:20	ICP2-HE_140606C	24	24813
Chromium	ND	mg/L		0.01		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Cobalt	ND	mg/L		0.01		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Copper	0.003	mg/L		0.001		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Iron	0.22	mg/L		0.02		E200.7	06/06/14 15:07 / sld	06/05/14 09:20	ICP2-HE_140606C	24	24813
Lead	0.0004	mg/L		0.0003		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Magnesium	4	mg/L		1		E200.7	06/06/14 15:07 / sld	06/05/14 09:20	ICP2-HE_140606C	24	24813
Manganese	0.010	mg/L		0.001		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Mercury	0.000042	mg/L		5E-06		E245.1	06/10/14 13:00 / sbk	06/09/14 08:04	HGCV202-H_140610A	23	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Nickel	ND	mg/L		0.002		E200.8	06/11/14 06:09 / dck	06/05/14 09:20	ICPMS204-B_140610B	74	24813
Potassium	1	mg/L		1		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Selenium	ND	mg/L		0.001		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Silver	ND	mg/L		0.0002		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Sodium	3	mg/L		1		E200.7	06/06/14 15:07 / sld	06/05/14 09:20	ICP2-HE_140606C	24	24813
Uranium	0.0004	mg/L		0.0002		E200.8	06/11/14 06:09 / dck	06/05/14 09:20	ICPMS204-B_140610B	74	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14060105-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813
Zinc	ND	mg/L		0.008		E200.8	06/10/14 02:03 / dck	06/05/14 09:20	ICPMS204-B_140609A	193	24813

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14060105-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.2	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	1	R98310
PHYSICAL CHARACTERISTICS											
Moisture	55.0	wt%		0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	1	R98453
3050 EXTRACTABLE METALS											
Aluminum	12000	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Antimony	ND	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Arsenic	23	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Barium	153	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Boron	ND	mg/kg		5		SW6020	06/26/14 20:32 / dck	06/24/14 08:04	ICPMS204-B_140626B	74	25045
Cadmium	1.1	mg/kg		0.2		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Chromium	57	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Cobalt	ND	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Copper	169	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Iron	16100	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Lead	85	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Manganese	542	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Molybdenum	8	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Nickel	27	mg/kg		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	101	25045
Selenium	ND	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Silver	ND	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Uranium	ND	mg/kg		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Vanadium	51	mg/kg		1		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	34	25045
Zinc	199	mg/kg		5		SW6010B	06/18/14 14:24 / sld	06/17/14 07:31	ICP2-HE_140618B	22	24960
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 10:55 / sbk	06/19/14 11:31	HGCV201-H_140620A	7	25007
METAL, DRY WEIGHT											
Aluminum	26600	mg/kg-dry		7		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14060105-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Arsenic	51	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Barium	341	mg/kg-dry		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Boron	10	mg/kg-dry		10		SW6020	06/26/14 20:32 / dck	06/24/14 08:04	ICPMS204-B_140626B	248	25045
Cadmium	2.3	mg/kg-dry		0.3		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Chromium	126	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Cobalt	11	mg/kg-dry		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Copper	376	mg/kg-dry		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Iron	35700	mg/kg-dry		6		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Lead	189	mg/kg-dry		7		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Manganese	1210	mg/kg-dry		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Molybdenum	19	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Nickel	60	mg/kg-dry		5		SW6010B	06/25/14 22:25 / sld	06/24/14 08:04	ICP2-HE_140625A	331	25045
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Uranium	9	mg/kg-dry		5		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Vanadium	113	mg/kg-dry		1		SW6020	06/25/14 13:19 / dck	06/24/14 08:04	ICPMS204-B_140625A	219	25045
Zinc	442	mg/kg-dry		5		SW6010B	06/18/14 14:24 / sld	06/17/14 07:31	ICP2-HE_140618B	200	24960
Mercury	0.17	mg/kg-dry		0.10		SW7471B	06/20/14 10:55 / sbk	06/19/14 11:31	HGCV201-H_140620A	46	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14060105-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	49.4	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	2	R98310
PHYSICAL CHARACTERISTICS											
Moisture	21.3	wt%		0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	3	R98453
3050 EXTRACTABLE METALS											
Aluminum	2760	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Antimony	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Arsenic	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Barium	39	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Beryllium	ND	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Boron	ND	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Cadmium	ND	mg/kg		0.2		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Chromium	7	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Cobalt	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Copper	27	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Iron	10600	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Lead	14	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Manganese	109	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Molybdenum	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Nickel	ND	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Selenium	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Silver	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Uranium	ND	mg/kg		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	140	24961
Vanadium	31	mg/kg		1		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
Zinc	138	mg/kg		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	34	24961
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 10:57 / sbk	06/19/14 11:31	HGCV201-H_140620A	8	25007
METAL, DRY WEIGHT											
Aluminum	3510	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14060105-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Arsenic	6	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Barium	50	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Beryllium	ND	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Boron	ND	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Cadmium	0.2	mg/kg-dry		0.2		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Chromium	9	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Cobalt	ND	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Copper	34	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Iron	13400	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Lead	18	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Manganese	139	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Molybdenum	ND	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Nickel	ND	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Selenium	ND	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Silver	ND	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Uranium	ND	mg/kg-dry		5		SW6020	06/20/14 01:05 / dck	06/17/14 07:32	ICPMS204-B_140619B	216	24961
Vanadium	39	mg/kg-dry		1		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Zinc	175	mg/kg-dry		5		SW6010B	06/18/14 15:08 / sld	06/17/14 07:32	ICP2-HE_140618B	209	24961
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/20/14 10:57 / sbk	06/19/14 11:31	HGCV201-H_140620A	47	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14060105-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	17.8	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	3	R98310
PHYSICAL CHARACTERISTICS											
Moisture	16.0	wt%		0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	4	R98453
3050 EXTRACTABLE METALS											
Aluminum	2380	mg/kg		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	46	24962
Antimony	ND	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Arsenic	ND	mg/kg		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	46	24962
Barium	26	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Beryllium	ND	mg/kg		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	46	24962
Boron	ND	mg/kg		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	46	24962
Cadmium	ND	mg/kg		0.2		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Chromium	ND	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Cobalt	ND	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Copper	13	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Iron	3680	mg/kg		5		SW6010B	06/25/14 21:41 / sld	06/20/14 16:02	ICP2-HE_140625A	89	25018
Lead	6	mg/kg		5		SW6020	06/25/14 15:31 / dck	06/20/14 16:02	ICPMS204-B_140625A	64	25018
Manganese	152	mg/kg		5		SW6010B	06/25/14 21:41 / sld	06/20/14 16:02	ICP2-HE_140625A	89	25018
Molybdenum	ND	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Nickel	ND	mg/kg		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	46	24962
Selenium	ND	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Silver	ND	mg/kg		5		SW6020	06/25/14 15:31 / dck	06/20/14 16:02	ICPMS204-B_140625A	64	25018
Uranium	ND	mg/kg		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Vanadium	11	mg/kg		1		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	154	24962
Zinc	19	mg/kg		5		SW6010B	07/03/14 00:46 / sld	06/30/14 08:15	ICP2-HE_140702A	181	25134
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 11:00 / sbk	06/19/14 11:31	HGCV201-H_140620A	9	25007
METAL, DRY WEIGHT											
Aluminum	2830	mg/kg-dry		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	218	24962

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14060105-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 17:45
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Arsenic	ND	mg/kg-dry		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	218	24962
Barium	30	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Beryllium	ND	mg/kg-dry		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	218	24962
Boron	ND	mg/kg-dry		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	218	24962
Cadmium	ND	mg/kg-dry		0.2		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Chromium	ND	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Cobalt	ND	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Copper	16	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Iron	4370	mg/kg-dry		5		SW6010B	06/25/14 21:41 / sld	06/20/14 16:02	ICP2-HE_140625A	344	25018
Lead	7	mg/kg-dry		5		SW6020	06/25/14 15:31 / dck	06/20/14 16:02	ICPMS204-B_140625A	222	25018
Manganese	181	mg/kg-dry		5		SW6010B	06/25/14 21:41 / sld	06/20/14 16:02	ICP2-HE_140625A	344	25018
Molybdenum	ND	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Nickel	ND	mg/kg-dry		5		SW6010B	06/18/14 15:52 / sld	06/17/14 07:33	ICP2-HE_140618B	218	24962
Selenium	ND	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 15:31 / dck	06/20/14 16:02	ICPMS204-B_140625A	222	25018
Uranium	ND	mg/kg-dry		5		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Vanadium	13	mg/kg-dry		1		SW6020	06/20/14 02:06 / dck	06/17/14 07:33	ICPMS204-B_140619B	219	24962
Zinc	23	mg/kg-dry		5		SW6010B	07/03/14 00:46 / sld	06/30/14 08:15	ICP2-HE_140702A	334	25134
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/20/14 11:00 / sbk	06/19/14 11:31	HGCV201-H_140620A	48	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14060105-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.2	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	4	R98310
PHYSICAL CHARACTERISTICS											
Moisture	63.2	wt%		0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	5	R98453
3050 EXTRACTABLE METALS											
Aluminum	8840	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Antimony	ND	mg/kg		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	35	25045
Arsenic	110	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Barium	140	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Boron	ND	mg/kg		5		SW6020	06/26/14 20:36 / dck	06/24/14 08:04	ICPMS204-B_140626B	75	25045
Cadmium	6.0	mg/kg		0.2		SW6010B	06/18/14 14:28 / sld	06/17/14 07:31	ICP2-HE_140618B	23	24960
Chromium	52	mg/kg		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	35	25045
Cobalt	ND	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Copper	1080	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Iron	16300	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Lead	279	mg/kg		5		SW6010B	06/18/14 14:28 / sld	06/17/14 07:31	ICP2-HE_140618B	23	24960
Manganese	672	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Molybdenum	7	mg/kg		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	35	25045
Nickel	23	mg/kg		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	102	25045
Selenium	ND	mg/kg		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	35	25045
Silver	ND	mg/kg		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	35	25045
Uranium	8	mg/kg		5		SW6020	07/01/14 13:20 / dck	06/30/14 08:12	ICPMS204-B_140701A	37	25132
Vanadium	38	mg/kg		1		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	35	25045
Zinc	1190	mg/kg		5		SW6010B	06/18/14 14:28 / sld	06/17/14 07:31	ICP2-HE_140618B	23	24960
METALS, TOTAL											
Mercury	0.44	mg/kg		0.10		SW7471B	06/20/14 12:12 / sbk	06/19/14 11:31	HGCV201-H_140620A	35	25007
METAL, DRY WEIGHT											
Aluminum	24000	mg/kg-dry		10		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14060105-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00 **DateReceived:** 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	220	25045
Arsenic	300	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Barium	381	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Boron	ND	mg/kg-dry		10		SW6020	06/26/14 20:36 / dck	06/24/14 08:04	ICPMS204-B_140626B	249	25045
Cadmium	16.3	mg/kg-dry		0.2		SW6010B	06/18/14 14:28 / sld	06/17/14 07:31	ICP2-HE_140618B	201	24960
Chromium	142	mg/kg-dry		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	220	25045
Cobalt	13	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Copper	2940	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Iron	44400	mg/kg-dry		8		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Lead	759	mg/kg-dry		8		SW6010B	06/18/14 14:28 / sld	06/17/14 07:31	ICP2-HE_140618B	201	24960
Manganese	1830	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Molybdenum	20	mg/kg-dry		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	220	25045
Nickel	63	mg/kg-dry		5		SW6010B	06/25/14 22:28 / sld	06/24/14 08:04	ICP2-HE_140625A	332	25045
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	220	25045
Silver	8	mg/kg-dry		5		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	220	25045
Uranium	22	mg/kg-dry		5		SW6020	07/01/14 13:20 / dck	06/30/14 08:11	ICPMS204-B_140701A	84	25132
Vanadium	104	mg/kg-dry		2		SW6020	06/25/14 13:24 / dck	06/24/14 08:04	ICPMS204-B_140625A	220	25045
Zinc	3230	mg/kg-dry		5		SW6010B	06/18/14 14:28 / sld	06/17/14 07:31	ICP2-HE_140618B	201	24960
Mercury	1.2	mg/kg-dry		0.10		SW7471B	06/20/14 12:12 / sbk	06/19/14 11:31	HGCV201-H_140620A	74	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14060105-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	33.2	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	5	R98310
PHYSICAL CHARACTERISTICS											
Moisture	21.7	wt%		0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	6	R98453
3050 EXTRACTABLE METALS											
Aluminum	4080	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Antimony	ND	mg/kg		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Arsenic	64	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Barium	63	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Beryllium	ND	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Boron	ND	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Cadmium	2.5	mg/kg		0.2		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Chromium	30	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Cobalt	11	mg/kg		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Copper	679	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Iron	48100	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Lead	171	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Manganese	617	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Molybdenum	ND	mg/kg		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Nickel	15	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Selenium	ND	mg/kg		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Silver	ND	mg/kg		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Uranium	ND	mg/kg		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	141	24961
Vanadium	70	mg/kg		1		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
Zinc	1100	mg/kg		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	35	24961
METALS, TOTAL											
Mercury	0.12	mg/kg		0.10		SW7471B	06/20/14 11:12 / sbk	06/19/14 11:31	HGCV201-H_140620A	14	25007
METAL, DRY WEIGHT											
Aluminum	5220	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14060105-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Arsenic	81	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Barium	80	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Beryllium	ND	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Boron	ND	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Cadmium	3.2	mg/kg-dry		0.2		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Chromium	39	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Cobalt	14	mg/kg-dry		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Copper	867	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Iron	61500	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Lead	219	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Manganese	788	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Molybdenum	6	mg/kg-dry		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Nickel	19	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Selenium	ND	mg/kg-dry		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Silver	ND	mg/kg-dry		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Uranium	ND	mg/kg-dry		5		SW6020	06/20/14 01:10 / dck	06/17/14 07:32	ICPMS204-B_140619B	217	24961
Vanadium	90	mg/kg-dry		1		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Zinc	1410	mg/kg-dry		5		SW6010B	06/18/14 15:12 / sld	06/17/14 07:32	ICP2-HE_140618B	210	24961
Mercury	0.16	mg/kg-dry		0.10		SW7471B	06/20/14 11:12 / sbk	06/19/14 11:31	HGCV201-H_140620A	53	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14060105-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00 **DateReceived:** 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	21.2	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	6	R98310
PHYSICAL CHARACTERISTICS											
Moisture	17.2	wt%		0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	7	R98453
3050 EXTRACTABLE METALS											
Aluminum	3380	mg/kg		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	47	24962
Antimony	ND	mg/kg		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Arsenic	61	mg/kg		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	90	25018
Barium	65	mg/kg		5		SW6010B	07/03/14 00:49 / sld	06/30/14 08:15	ICP2-HE_140702A	182	25134
Beryllium	ND	mg/kg		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	47	24962
Boron	ND	mg/kg		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	47	24962
Cadmium	1.5	mg/kg		0.2		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	47	24962
Chromium	7	mg/kg		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Cobalt	ND	mg/kg		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Copper	535	mg/kg		5		SW6010B	07/03/14 00:49 / sld	06/30/14 08:15	ICP2-HE_140702A	182	25134
Iron	13600	mg/kg		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	90	25018
Lead	153	mg/kg		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	90	25018
Manganese	858	mg/kg		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	90	25018
Molybdenum	ND	mg/kg		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Nickel	ND	mg/kg		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	47	24962
Selenium	ND	mg/kg		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Silver	ND	mg/kg		5		SW6020	06/25/14 15:36 / dck	06/20/14 16:02	ICPMS204-B_140625A	65	25018
Uranium	ND	mg/kg		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Vanadium	19	mg/kg		1		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	155	24962
Zinc	936	mg/kg		5		SW6010B	07/03/14 00:49 / sld	06/30/14 08:15	ICP2-HE_140702A	182	25134
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 11:14 / sbk	06/19/14 11:31	HGCV201-H_140620A	15	25007
METAL, DRY WEIGHT											
Aluminum	4080	mg/kg-dry		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	219	24962

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14060105-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 16:00
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Arsenic	73	mg/kg-dry		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	345	25018
Barium	78	mg/kg-dry		5		SW6010B	07/03/14 00:49 / sld	06/30/14 08:15	ICP2-HE_140702A	335	25134
Beryllium	ND	mg/kg-dry		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	219	24962
Boron	ND	mg/kg-dry		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	219	24962
Cadmium	1.8	mg/kg-dry		0.2		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	219	24962
Chromium	8	mg/kg-dry		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Cobalt	ND	mg/kg-dry		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Copper	646	mg/kg-dry		5		SW6010B	07/03/14 00:49 / sld	06/30/14 08:15	ICP2-HE_140702A	335	25134
Iron	16400	mg/kg-dry		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	345	25018
Lead	184	mg/kg-dry		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	345	25018
Manganese	1040	mg/kg-dry		5		SW6010B	06/25/14 21:44 / sld	06/20/14 16:02	ICP2-HE_140625A	345	25018
Molybdenum	ND	mg/kg-dry		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Nickel	ND	mg/kg-dry		5		SW6010B	06/18/14 15:56 / sld	06/17/14 07:33	ICP2-HE_140618B	219	24962
Selenium	ND	mg/kg-dry		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 15:36 / dck	06/20/14 16:02	ICPMS204-B_140625A	223	25018
Uranium	ND	mg/kg-dry		5		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Vanadium	23	mg/kg-dry		1		SW6020	06/20/14 02:11 / dck	06/17/14 07:33	ICPMS204-B_140619B	220	24962
Zinc	1130	mg/kg-dry		5		SW6010B	07/03/14 00:49 / sld	06/30/14 08:15	ICP2-HE_140702A	335	25134
Mercury	0.10	mg/kg-dry		0.10		SW7471B	06/20/14 11:14 / sbk	06/19/14 11:31	HGCV201-H_140620A	54	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve <0.065mm
Lab ID: H14060105-012
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.6	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	7	R98310
PHYSICAL CHARACTERISTICS											
Moisture	49.0	wt%	H	0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	8	R98453
3050 EXTRACTABLE METALS											
Aluminum	14200	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Antimony	ND	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Arsenic	36	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Barium	142	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Boron	ND	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Cadmium	0.5	mg/kg		0.2		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Chromium	25	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Cobalt	ND	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Copper	52	mg/kg		5		SW6010B	07/03/14 00:23 / sld	06/30/14 08:12	ICP2-HE_140702A	175	25132
Iron	14700	mg/kg		5		SW6010B	07/03/14 00:23 / sld	06/30/14 08:12	ICP2-HE_140702A	175	25132
Lead	59	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Manganese	215	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Nickel	13	mg/kg		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	103	25045
Selenium	ND	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Silver	ND	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Uranium	ND	mg/kg		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Vanadium	34	mg/kg		1		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	36	25045
Zinc	40	mg/kg		5		SW6010B	06/18/14 14:39 / sld	06/17/14 07:31	ICP2-HE_140618B	26	24960
METALS, TOTAL											
Mercury	0.11	mg/kg		0.10		SW7471B	06/20/14 11:16 / sbk	06/19/14 11:31	HGCV201-H_140620A	16	25007
METAL, DRY WEIGHT											
Aluminum	28000	mg/kg-dry		6		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve <0.065mm
Lab ID: H14060105-012
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15 **DateReceived:** 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Arsenic	70	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Barium	279	mg/kg-dry		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045
Boron	7	mg/kg-dry		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045
Cadmium	1.0	mg/kg-dry		0.2		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Chromium	49	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Cobalt	8	mg/kg-dry		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045
Copper	103	mg/kg-dry		5		SW6010B	07/03/14 00:23 / sld	06/30/14 08:12	ICP2-HE_140702A	329	25132
Iron	28800	mg/kg-dry		6		SW6010B	07/03/14 00:23 / sld	06/30/14 08:12	ICP2-HE_140702A	329	25132
Lead	116	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Manganese	423	mg/kg-dry		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Nickel	25	mg/kg-dry		5		SW6010B	06/25/14 22:32 / sld	06/24/14 08:04	ICP2-HE_140625A	333	25045
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Vanadium	66	mg/kg-dry		1		SW6020	06/25/14 13:28 / dck	06/24/14 08:04	ICPMS204-B_140625A	221	25045
Zinc	79	mg/kg-dry		5		SW6010B	06/18/14 14:39 / sld	06/17/14 07:31	ICP2-HE_140618B	204	24960
Mercury	0.22	mg/kg-dry		0.10		SW7471B	06/20/14 11:16 / sbk	06/19/14 11:31	HGCV201-H_140620A	55	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 0.065-1mm
Lab ID: H14060105-013
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	91.0	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	8	R98310
PHYSICAL CHARACTERISTICS											
Moisture	23.5	wt%	H	0.2		D2974	06/30/14 17:46 / edp		DRYING OVEN 2_140627A	9	R98453
3050 EXTRACTABLE METALS											
Aluminum	8250	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Antimony	ND	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Arsenic	24	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Barium	128	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Beryllium	ND	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Boron	ND	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Cadmium	ND	mg/kg		0.2		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Chromium	11	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Cobalt	ND	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Copper	22	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Iron	12900	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Lead	6	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Manganese	134	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Molybdenum	ND	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Nickel	7	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Selenium	ND	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Silver	ND	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Uranium	ND	mg/kg		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	142	24961
Vanadium	34	mg/kg		1		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
Zinc	31	mg/kg		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	38	24961
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 11:19 / sbk	06/19/14 11:31	HGCV201-H_140620A	17	25007
METAL, DRY WEIGHT											
Aluminum	10800	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 0.065-1mm
Lab ID: H14060105-013
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Arsenic	31	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Barium	167	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Beryllium	ND	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Boron	ND	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Cadmium	ND	mg/kg-dry		0.2		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Chromium	14	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Cobalt	6	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Copper	28	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Iron	16800	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Lead	7	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Manganese	176	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Molybdenum	ND	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Nickel	10	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Selenium	ND	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Silver	ND	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Uranium	ND	mg/kg-dry		5		SW6020	06/20/14 01:14 / dck	06/17/14 07:32	ICPMS204-B_140619B	218	24961
Vanadium	44	mg/kg-dry		1		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Zinc	41	mg/kg-dry		5		SW6010B	06/18/14 15:23 / sld	06/17/14 07:32	ICP2-HE_140618B	213	24961
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/20/14 11:19 / sbk	06/19/14 11:31	HGCV201-H_140620A	56	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 1-2mm
Lab ID: H14060105-014
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	1.1	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	9	R98310
PHYSICAL CHARACTERISTICS											
Moisture	32.8	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	10	R98453
3050 EXTRACTABLE METALS											
Aluminum	9560	mg/kg		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	61	24962
Antimony	ND	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Arsenic	25	mg/kg		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	61	24962
Barium	214	mg/kg		5		SW6010B	07/03/14 01:07 / sld	06/30/14 08:15	ICP2-HE_140702A	187	25134
Beryllium	ND	mg/kg		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	61	24962
Boron	ND	mg/kg		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	61	24962
Cadmium	ND	mg/kg		0.2		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Chromium	15	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Cobalt	6	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Copper	25	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Iron	17700	mg/kg		5		SW6010B	06/25/14 22:10 / sld	06/20/14 16:02	ICP2-HE_140625A	97	25018
Lead	6	mg/kg		5		SW6020	06/25/14 16:02 / dck	06/20/14 16:02	ICPMS204-B_140625A	71	25018
Manganese	224	mg/kg		5		SW6010B	06/25/14 22:10 / sld	06/20/14 16:02	ICP2-HE_140625A	97	25018
Molybdenum	ND	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Nickel	9	mg/kg		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	61	24962
Selenium	ND	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Silver	ND	mg/kg		5		SW6020	06/25/14 16:02 / dck	06/20/14 16:02	ICPMS204-B_140625A	71	25018
Uranium	ND	mg/kg		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Vanadium	30	mg/kg		1		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	161	24962
Zinc	37	mg/kg		5		SW6010B	07/03/14 01:07 / sld	06/30/14 08:15	ICP2-HE_140702A	187	25134
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 11:21 / sbk	06/19/14 11:31	HGCV201-H_140620A	18	25007
METAL, DRY WEIGHT											
Aluminum	14200	mg/kg-dry		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	228	24962

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 1-2mm
Lab ID: H14060105-014
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 13:15
DateReceived: 06/04/14
Report Date: 07/08/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Arsenic	37	mg/kg-dry		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	228	24962
Barium	319	mg/kg-dry		5		SW6010B	07/03/14 01:07 / sld	06/30/14 08:15	ICP2-HE_140702A	340	25134
Beryllium	ND	mg/kg-dry		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	228	24962
Boron	ND	mg/kg-dry		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	228	24962
Cadmium	0.2	mg/kg-dry		0.2		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Chromium	23	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Cobalt	8	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Copper	38	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Iron	26400	mg/kg-dry		5		SW6010B	06/25/14 22:10 / sld	06/20/14 16:02	ICP2-HE_140625A	350	25018
Lead	8	mg/kg-dry		5		SW6020	06/25/14 16:02 / dck	06/20/14 16:02	ICPMS204-B_140625A	224	25018
Manganese	333	mg/kg-dry		5		SW6010B	06/25/14 22:10 / sld	06/20/14 16:02	ICP2-HE_140625A	350	25018
Molybdenum	ND	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Nickel	14	mg/kg-dry		5		SW6010B	06/18/14 16:48 / sld	06/17/14 13:37	ICP2-HE_140618B	228	24962
Selenium	ND	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 16:02 / dck	06/20/14 16:02	ICPMS204-B_140625A	224	25018
Uranium	ND	mg/kg-dry		5		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Vanadium	44	mg/kg-dry		1		SW6020	06/20/14 02:37 / dck	06/17/14 13:37	ICPMS204-B_140619B	221	24962
Zinc	55	mg/kg-dry		5		SW6010B	07/03/14 01:07 / sld	06/30/14 08:15	ICP2-HE_140702A	340	25134
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/20/14 11:21 / sbk	06/19/14 11:31	HGCV201-H_140620A	57	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140610wa

Date: *08-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **06/10/14 11:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **HGCV202-H_140610A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **06/10/14 11:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		105	95	105				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **HGCV202-H_140610A: 18** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **06/10/14 12:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		105	90	110				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140620sa

Date: *08-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **06/20/14 10:41** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00096	0.50	0.001		96	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/20/14 10:43** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0023	0.50	0.0025		92	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 33** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/20/14 11:57** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		100	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 38** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/20/14 12:19** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		98	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24813

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140606C: 15** SampType: **Method Blank** Lab ID: **MB-24813** Method: **E200.7**
Analysis Date: **06/06/14 14:34** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.004	0.003									
Boron	ND	0.002									
Calcium	0.04	0.03									
Iron	ND	0.005									
Magnesium	0.01	0.01									
Potassium	ND	0.05									
Sodium	ND	0.02									

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICP2-HE_140606C: 16** SampType: **Laboratory Control Sample** Lab ID: **LCS-24813** Method: **E200.7**
Analysis Date: **06/06/14 14:38** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.60	0.030	2.5	0.00357	104	85	115				
Boron	0.509	0.050	0.5		102	85	115				
Calcium	24.5	1.0	25	0.03948	98	85	115				
Iron	2.45	0.020	2.5		98	85	115				
Magnesium	25.2	1.0	25	0.01239	101	85	115				
Potassium	25.1	1.0	25		100	85	115				
Sodium	25.1	1.0	25		100	85	115				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICP2-HE_140606C: 25** SampType: **Serial Dilution** Lab ID: **H14060105-005CDIL** Method: **E200.7**
Analysis Date: **06/06/14 15:11** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.322	0.030				0	0	0.3251	1.1	10	
Boron	ND	0.050				0	0	0.00624		10	
Calcium	27.7	1.0				0	0	27.67	0.2	10	
Iron	0.232	0.027				0	0	0.2193		10	N
Magnesium	4.38	1.0				0	0	4.256	2.8	10	
Potassium	0.569	1.0				0	0	1.015		10	N
Sodium	2.42	1.0				0	0	2.531	4.4	10	

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24813

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140606C: 26** SampType: **Sample Matrix Spike** Lab ID: **H14060105-005CMS3** Method: **E200.7**

Analysis Date: **06/06/14 15:15** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.93	0.030	2.5	0.3251	104	70	130				
Boron	0.483	0.050	0.5	0.00624	95	70	130				
Calcium	51.4	1.0	25	27.67	95	70	130				
Iron	2.64	0.020	2.5	0.2193	97	70	130				
Magnesium	28.9	1.0	25	4.256	99	70	130				
Potassium	25.8	1.0	25	1.015	99	70	130				
Sodium	27.2	1.0	25	2.531	99	70	130				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICP2-HE_140606C: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-005CMSD3** Method: **E200.7**

Analysis Date: **06/06/14 15:19** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.86	0.030	2.5	0.3251	101	70	130	2.927	2.3	20	
Boron	0.468	0.050	0.5	0.00624	92	70	130	0.4826	3.1	20	
Calcium	51.3	1.0	25	27.67	95	70	130	51.4	0.1	20	
Iron	2.65	0.020	2.5	0.2193	97	70	130	2.636	0.5	20	
Magnesium	29.0	1.0	25	4.256	99	70	130	28.89	0.2	20	
Potassium	26.0	1.0	25	1.015	100	70	130	25.75	1.0	20	
Sodium	27.4	1.0	25	2.531	100	70	130	27.24	0.8	20	

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24813

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 160** SampType: **Method Blank** Lab ID: **MB-24813** Method: **E200.8**

Analysis Date: **06/09/14 23:38** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	3E-05									
Arsenic	ND	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Cadmium	ND	3E-05									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Lead	ND	3E-05									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									
Selenium	ND	0.0002									
Silver	8E-05	7E-05									
Uranium	ND	3E-05									
Vanadium	8E-05	7E-05									
Zinc	0.001	0.001									

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140609A: 161** SampType: **Laboratory Control Sample** Lab ID: **LCS-24813** Method: **E200.8**

Analysis Date: **06/09/14 23:42** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.502	0.0010	0.5		**100**	85	115				
Arsenic	0.505	0.0010	0.5		**101**	85	115				
Barium	0.508	0.050	0.5		**102**	85	115				
Beryllium	0.247	0.0010	0.25		**99**	85	115				
Cadmium	0.255	0.0010	0.25		**102**	85	115				
Chromium	0.501	0.0050	0.5		**100**	85	115				
Cobalt	0.480	0.0050	0.5		**96**	85	115				
Copper	0.515	0.0050	0.5		**103**	85	115				
Lead	0.503	0.0010	0.5		**101**	85	115				
Manganese	2.37	0.0010	2.5		**95**	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24813

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 161** SampType: **Laboratory Control Sample** Lab ID: **LCS-24813** Method: **E200.8**

Analysis Date: **06/09/14 23:42** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.519	0.0010	0.5		104	85	115				
Nickel	0.510	0.0050	0.5		102	85	115				
Potassium	23.1	1.0	25		92	85	115				
Selenium	0.513	0.0010	0.5		103	85	115				
Silver	0.0473	0.0010	0.05	0.0000823	94	85	115				
Uranium	0.484	0.00030	0.5		97	85	115				
Vanadium	0.491	0.010	0.5	0.0000766	98	85	115				
Zinc	0.495	0.010	0.5	0.001378	99	85	115				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140609A: 194** SampType: **Sample Matrix Spike** Lab ID: **H14060105-005CMS3** Method: **E200.8**

Analysis Date: **06/10/14 02:07** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.502	0.0010	0.5	0.0002323	100	70	130				
Arsenic	0.522	0.0010	0.5	0.004208	104	70	130				
Barium	0.524	0.050	0.5	0.01805	101	70	130				
Beryllium	0.243	0.0010	0.25		97	70	130				
Cadmium	0.252	0.0010	0.25	0.0000377	101	70	130				
Chromium	0.505	0.0050	0.5	0.0003735	101	70	130				
Cobalt	0.469	0.0050	0.5	0.001434	93	70	130				
Copper	0.513	0.0050	0.5	0.003073	102	70	130				
Lead	0.498	0.0010	0.5	0.0003707	100	70	130				
Manganese	2.33	0.0010	2.5	0.0096	93	70	130				
Molybdenum	0.518	0.0010	0.5	0.0001661	104	70	130				
Nickel	0.506	0.0050	0.5		101	70	130				
Potassium	25.5	1.0	25	1.155	97	70	130				
Selenium	0.505	0.0010	0.5	0.0009209	101	70	130				
Silver	0.0462	0.0010	0.05		92	70	130				
Uranium	0.490	0.00030	0.5	0.0004075	98	70	130				
Vanadium	0.503	0.010	0.5	0.001563	100	70	130				
Zinc	0.488	0.010	0.5	0.002857	97	70	130				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24813

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 195** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-005CMSD3** Method: **E200.8**

Analysis Date: **06/10/14 02:11** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.515	0.0010	0.5	0.0002323	103	70	130	0.5024	2.5	20	
Arsenic	0.529	0.0010	0.5	0.004208	105	70	130	0.5225	1.2	20	
Barium	0.531	0.050	0.5	0.01805	103	70	130	0.5245	1.2	20	
Beryllium	0.249	0.0010	0.25		100	70	130	0.2432	2.4	20	
Cadmium	0.261	0.0010	0.25	0.0000377	104	70	130	0.2519	3.5	20	
Chromium	0.525	0.0050	0.5	0.0003735	105	70	130	0.5048	3.9	20	
Cobalt	0.479	0.0050	0.5	0.001434	96	70	130	0.4686	2.3	20	
Copper	0.527	0.0050	0.5	0.003073	105	70	130	0.5132	2.7	20	
Lead	0.517	0.0010	0.5	0.0003707	103	70	130	0.4982	3.8	20	
Manganese	2.39	0.0010	2.5	0.0096	95	70	130	2.326	2.5	20	
Molybdenum	0.531	0.0010	0.5	0.0001661	106	70	130	0.5179	2.6	20	
Nickel	0.523	0.0050	0.5		105	70	130	0.5059	3.2	20	
Potassium	25.4	1.0	25	1.155	97	70	130	25.52	0.5	20	
Selenium	0.511	0.0010	0.5	0.0009209	102	70	130	0.5051	1.2	20	
Silver	0.0474	0.0010	0.05		95	70	130	0.04617	2.7	20	
Uranium	0.502	0.00030	0.5	0.0004075	100	70	130	0.4905	2.4	20	
Vanadium	0.510	0.010	0.5	0.001563	102	70	130	0.5032	1.3	20	
Zinc	0.499	0.010	0.5	0.002857	99	70	130	0.4876	2.4	20	

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140610B: 54** SampType: **Method Blank** Lab ID: **MB-24813** Method: **E200.8**

Analysis Date: **06/11/14 04:39** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	3E-05									
Arsenic	ND	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Cadmium	ND	3E-05									
Chromium	ND	5E-05									
Cobalt	2E-05	2E-05									
Copper	ND	0.0003									
Lead	ND	3E-05									
Manganese	ND	0.00010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24813

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140610B: 54** SampType: **Method Blank** Lab ID: **MB-24813** Method: **E200.8**

Analysis Date: **06/11/14 04:39** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	0.2	0.02									
Selenium	ND	0.0002									
Silver	ND	7E-05									
Uranium	ND	3E-05									
Vanadium	7E-05	7E-05									
Zinc	0.002	0.001									

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24831

Date: *08-Jul-14*

Run ID :Run Order: **FIA202-HE_140606A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24831** Method: **E365.1**
Analysis Date: **06/06/14 10:49** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.393	0.010	0.4		98	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA202-HE_140606A: 12** SampType: **Method Blank** Lab ID: **MB-24831** Method: **E365.1**
Analysis Date: **06/06/14 10:50** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA202-HE_140606A: 18** SampType: **Sample Matrix Spike** Lab ID: **H14060105-001Dms** Method: **E365.1**
Analysis Date: **06/06/14 10:57** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.181	0.010	0.2		90	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA202-HE_140606A: 19** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-001Dmsd** Method: **E365.1**
Analysis Date: **06/06/14 10:58** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.181	0.010	0.2		91	90	110	0.1808	0.2	20	

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24850

Date: *08-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 4** SampType: **Method Blank** Lab ID: **MB-24850** Method: **E245.1**
Analysis Date: **06/10/14 11:40** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **HGCV202-H_140610A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-24850** Method: **E245.1**
Analysis Date: **06/10/14 11:44** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		91	90	110				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **HGCV202-H_140610A: 8** SampType: **Sample Matrix Spike** Lab ID: **H14060075-002DMS** Method: **E245.1**
Analysis Date: **06/10/14 11:57** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00001632	88	70	130				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **HGCV202-H_140610A: 9** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060075-002DMSD** Method: **E245.1**
Analysis Date: **06/10/14 12:01** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015	0.00001632	83	70	130	0.0001486	5.7	20	

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **HGCV202-H_140610A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14060106-002BMS** Method: **E245.1**
Analysis Date: **06/10/14 13:17** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000436	98	70	130				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24850

Date: *08-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-002BMSD** Method: **E245.1**

Analysis Date: **06/10/14 13:21** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000436	**96**	70	130	0.0001508	**1.2**	20	

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24860

Date: *08-Jul-14*

Run ID :Run Order: **FIA203-HE_140609B: 20** SampType: **Laboratory Control Sample** Lab ID: **LCS-24860** Method: **A4500 N-C**
Analysis Date: **06/09/14 12:56** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	18.7	0.30	18.7		100	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **FIA203-HE_140609B: 21** SampType: **Method Blank** Lab ID: **MB-24860** Method: **A4500 N-C**
Analysis Date: **06/09/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **FIA203-HE_140609B: 23** SampType: **Sample Matrix Spike** Lab ID: **H14060105-001Ams** Method: **A4500 N-C**
Analysis Date: **06/09/14 13:00** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.04	0.10	1		104	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **FIA203-HE_140609B: 24** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-001Amsd** Method: **A4500 N-C**
Analysis Date: **06/09/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.05	0.10	1		105	90	110	1.037	0.9	20	

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24960

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 19** SampType: **Method Blank** Lab ID: **MB-24960** Method: **SW6010B**
Analysis Date: **06/18/14 14:13** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	0.01									
Lead	1	0.6									
Zinc	0.4	0.09									

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140618B: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24960** Method: **SW6010B**
Analysis Date: **06/18/14 14:17** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	25.3	1.0	25		101	80	120				
Lead	51.2	1.0	50	1.111	100	80	120				
Zinc	52.4	1.0	50	0.374	104	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140618B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-24960** Method: **SW6010B**
Analysis Date: **06/18/14 14:21** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	133	1.0	134.4		99	73	105.1				
Lead	198	3.1	183.5	1.111	108	75.9	108.6				
Zinc	213	1.0	209	0.374	102	74.2	109.9				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140618B: 27** SampType: **Serial Dilution** Lab ID: **H14060105-012ADIL** Method: **SW6010B**
Analysis Date: **06/18/14 14:43** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.421	1.0				0	0	0.2714		10	N
Lead	46.9	15				0	0	42.21		10	N
Zinc	39.5	2.3				0	0	40.41	2.3	10	

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24960

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 28** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-012APDS** Method: **SW6010B**

Analysis Date: **06/18/14 14:46** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	119	1.0	125.2	0.2714	95	75	125				
Lead	272	3.2	250.5	42.21	92	75	125				
Zinc	284	1.0	250.5	40.41	97	75	125				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140618B: 29** SampType: **Sample Matrix Spike** Lab ID: **H14060105-012AMS** Method: **SW6010B**

Analysis Date: **06/18/14 14:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	23.3	1.0	24.32	0.2714	95	75	125				
Lead	92.4	3.1	48.64	42.21	103	75	125				
Zinc	97.0	1.0	48.64	40.41	116	75	125				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140618B: 30** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-012AMSD** Method: **SW6010B**

Analysis Date: **06/18/14 14:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	21.1	1.0	24.32	0.2714	86	75	125	23.32	9.8	20	
Lead	80.1	3.1	48.64	42.21	78	75	125	92.42	14	20	
Zinc	82.8	1.0	48.64	40.41	87	75	125	97.05	16	20	

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 31** SampType: **Method Blank** Lab ID: **MB-24961** Method: **SW6010B**

Analysis Date: **06/18/14 14:57** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.8	0.3									
Arsenic	ND	0.4									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	ND	0.1									
Chromium	ND	0.06									
Copper	ND	0.2									
Iron	2	0.6									
Lead	1	0.6									
Manganese	0.03	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	1	0.09									

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICP2-HE_140618B: 32** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24961** Method: **SW6010B**

Analysis Date: **06/18/14 15:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	247	5.0	250	0.824	99	80	120				
Arsenic	49.3	1.0	50		99	80	120				
Barium	49.4	1.0	50		99	80	120				
Beryllium	24.6	1.0	25		98	80	120				
Boron	50.3	1.0	50		101	80	120				
Chromium	47.7	1.0	50		95	80	120				
Copper	48.9	1.0	50		98	80	120				
Iron	247	5.0	250	1.63	98	80	120				
Lead	51.8	1.0	50	1.432	101	80	120				
Manganese	241	1.0	250	0.0285	96	80	120				
Nickel	46.4	1.0	50		93	80	120				
Vanadium	49.3	1.0	50		99	80	120				
Zinc	50.7	1.0	50	1.054	99	80	120				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 33** SampType: **Laboratory Control Sample** Lab ID: **LCS-24961** Method: **SW6010B**

Analysis Date: **06/18/14 15:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13000	5.0	14570	0.824	90	50.7	131.3				
Arsenic	308	1.8	339.9		91	72.3	106.4				
Barium	572	1.0	608.5		94	80.6	112.2				
Beryllium	45.9	1.0	50.55		91	76.3	108.6				
Boron	82.8	1.0	92.37		90	59.4	101.9				
Chromium	67.6	1.0	75.32		90	72.8	109.1				
Copper	259	1.1	277.5		93	77.5	109.6				
Iron	18600	5.0	22790	1.63	82	39.6	138.3				
Lead	196	3.2	185.3	1.432	105	75.9	108.6				
Manganese	374	1.0	365.7	0.0285	102	80.8	115.7				
Nickel	53.8	1.0	60.46		89	72.3	103.4				
Vanadium	64.9	1.0	72.35		90	66.6	107.3				
Zinc	211	1.0	211.1	1.054	99	74.2	109.9				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICP2-HE_140618B: 39** SampType: **Serial Dilution** Lab ID: **H14060105-013ADIL** Method: **SW6010B**

Analysis Date: **06/18/14 15:27** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	8380	16				0	0	8253	1.6	10	
Arsenic	21.5	8.7				0	0	23.84		10	N
Barium	131	1.0				0	0	127.7	2.9	10	
Beryllium	0.538	1.0				0	0	0.5983		10	N
Boron	ND	2.5				0	0	1.596		10	
Chromium	8.10	1.5				0	0	10.78		10	N
Copper	24.1	5.3				0	0	21.56		10	N
Iron	13100	14				0	0	12890	2.0	10	
Lead	46.5	15				0	0	13.07		10	N
Manganese	135	1.0				0	0	134.4	0.6	10	
Nickel	5.28	1.7				0	0	7.379		10	N
Vanadium	33.4	3.6				0	0	33.93		10	N
Zinc	32.0	2.3				0	0	31.28	2.3	10	

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 40** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-013APDS** Method: **SW6010B**

Analysis Date: **06/18/14 15:30** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9510	5.0	1246	8253		75	125				A
Arsenic	265	1.8	249.3	23.84	97	75	125				
Barium	364	1.0	249.3	127.7	95	75	125				
Beryllium	116	1.0	124.6	0.5983	93	75	125				
Boron	252	1.0	249.3	1.596	100	75	125				
Chromium	246	1.0	249.3	10.78	94	75	125				
Copper	257	1.1	249.3	21.56	94	75	125				
Iron	13800	5.0	1246	12890		75	125				A
Lead	257	3.2	249.3	13.07	98	75	125				
Manganese	1280	1.0	1246	134.4	92	75	125				
Nickel	233	1.0	249.3	7.379	91	75	125				
Vanadium	268	1.0	249.3	33.93	94	75	125				
Zinc	281	1.0	249.3	31.28	100	75	125				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICP2-HE_140618B: 41** SampType: **Sample Matrix Spike** Lab ID: **H14060105-013AMS** Method: **SW6010B**

Analysis Date: **06/18/14 15:34** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9030	5.0	242.5	8253		75	125				A
Arsenic	74.6	1.7	48.5	23.84	105	75	125				
Barium	173	1.0	48.5	127.7	94	75	125				
Beryllium	23.9	1.0	24.25	0.5983	96	75	125				
Boron	50.6	1.0	48.5	1.596	101	75	125				
Chromium	58.7	1.0	48.5	10.78	99	75	125				
Copper	64.5	1.1	48.5	21.56	89	75	125				
Iron	12100	5.0	242.5	12890		75	125				A
Lead	65.3	3.1	48.5	13.07	108	75	125				
Manganese	373	1.0	242.5	134.4	98	75	125				
Nickel	53.4	1.0	48.5	7.379	95	75	125				
Vanadium	77.5	1.0	48.5	33.93	90	75	125				
Zinc	80.3	1.0	48.5	31.28	101	75	125				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 42** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-013AMSD** Method: **SW6010B**

Analysis Date: **06/18/14 15:38** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9130	5.0	242.7	8253		75	125	9031	1.0	20	A
Arsenic	70.4	1.7	48.54	23.84	96	75	125	74.57	5.8	20	
Barium	169	1.0	48.54	127.7	85	75	125	173.1	2.4	20	
Beryllium	23.8	1.0	24.27	0.5983	96	75	125	23.94	0.4	20	
Boron	49.3	1.0	48.54	1.596	98	75	125	50.64	2.6	20	
Chromium	56.2	1.0	48.54	10.78	94	75	125	58.7	4.3	20	
Copper	63.5	1.1	48.54	21.56	86	75	125	64.52	1.6	20	
Iron	11900	5.0	242.7	12890		75	125	12080	1.6	20	A
Lead	58.1	3.1	48.54	13.07	93	75	125	65.32	12	20	
Manganese	344	1.0	242.7	134.4	87	75	125	372.7	7.9	20	
Nickel	50.3	1.0	48.54	7.379	89	75	125	53.41	5.9	20	
Vanadium	76.8	1.0	48.54	33.93	88	75	125	77.49	0.9	20	
Zinc	77.0	1.0	48.54	31.28	94	75	125	80.26	4.2	20	

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 136** SampType: **Method Blank** Lab ID: **MB-24961** Method: **SW6020**
Analysis Date: **06/20/14 00:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.1	0.02									
Arsenic	ND	0.06									
Cadmium	0.04	0.03									
Cobalt	ND	0.02									
Lead	ND	0.05									
Molybdenum	ND	0.03									
Selenium	ND	0.07									
Silver	ND	0.05									
Uranium	ND	0.03									

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICPMS204-B_140619B: 137** SampType: **Laboratory Control Sample** Lab ID: **LCS-24961** Method: **SW6020**
Analysis Date: **06/20/14 00:52** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.0	1.0	126	0.1181	37	2.2	92.9				
Arsenic	332	1.0	343		97	72.3	106.4				
Cadmium	118	1.0	137	0.042	86	73	105.1				
Cobalt	57.7	1.0	57.4		100	73.3	103.7				
Lead	199	1.0	187		106	75.9	108.6				
Molybdenum	166	1.0	172		97	68.6	105.8				
Selenium	189	1.0	196		96	72.5	112.2				
Silver	70.4	1.0	69		102	67.8	112.8				
Uranium	122	1.0	100		122	80	120				S

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICPMS204-B_140619B: 138** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24961** Method: **SW6020**
Analysis Date: **06/20/14 00:56** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.6	1.0	50	0.1181	97	80	120				
Arsenic	50.4	1.0	50		101	80	120				
Cadmium	25.1	1.0	25	0.042	100	80	120				
Cobalt	49.6	1.0	50		99	80	120				
Lead	48.9	1.0	50		98	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 138** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24961** Method: **SW6020**
Analysis Date: **06/20/14 00:56** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	50.2	1.0	50		101	80	120				
Selenium	47.6	1.0	50		95	80	120				
Silver	24.4	1.0	25		98	80	120				
Uranium	48.3	1.0	50		97	80	120				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICPMS204-B_140619B: 143** SampType: **Serial Dilution** Lab ID: **H14060105-013ADIL** Method: **SW6020**
Analysis Date: **06/20/14 01:18** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1564		10	
Arsenic	23.3	1.0				0	0	23.4	0.5	10	
Cadmium	ND	1.0				0	0	0.1389		10	
Cobalt	4.72	1.0				0	0	4.808	1.9	10	
Lead	5.71	1.0				0	0	5.731	0.3	10	
Molybdenum	ND	1.0				0	0	0.1205		10	
Selenium	ND	1.0				0	0	0.1489		10	
Silver	ND	1.0				0	0			10	
Uranium	0.557	1.0				0	0	0.5774		10	N

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICPMS204-B_140619B: 144** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-013APDS** Method: **SW6020**
Analysis Date: **06/20/14 01:23** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	460	1.0	484	0.1564	95	75	125				
Arsenic	492	1.0	484	23.4	97	75	125				
Cadmium	215	1.0	242	0.1389	89	75	125				
Cobalt	444	1.0	484	4.808	91	75	125				
Lead	465	1.0	484	5.731	95	75	125				
Molybdenum	480	1.0	484	0.1205	99	75	125				
Selenium	438	1.0	484	0.1489	90	75	125				
Silver	201	1.0	242		83	75	125				
Uranium	467	1.0	484	0.5774	96	75	125				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24961

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 145** SampType: **Sample Matrix Spike** Lab ID: **H14060105-013AMS** Method: **SW6020**

Analysis Date: **06/20/14 01:27** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	23.7	1.0	48.5	0.1564	49	75	125				S
Arsenic	74.7	1.0	48.5	23.4	106	75	125				
Cadmium	23.2	1.0	24.25	0.1389	95	75	125				
Cobalt	53.9	1.0	48.5	4.808	101	75	125				
Lead	56.2	1.0	48.5	5.731	104	75	125				
Molybdenum	49.2	1.0	48.5	0.1205	101	75	125				
Selenium	47.1	1.0	48.5	0.1489	97	75	125				
Silver	24.8	1.0	24.25		102	75	125				
Uranium	48.3	1.0	48.5	0.5774	98	75	125				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Run ID :Run Order: **ICPMS204-B_140619B: 146** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-013AMSD** Method: **SW6020**

Analysis Date: **06/20/14 01:31** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	23.4	1.0	48.54	0.1564	48	75	125	23.75	1.6	20	S
Arsenic	76.1	1.0	48.54	23.4	109	75	125	74.68	1.8	20	
Cadmium	22.8	1.0	24.27	0.1389	93	75	125	23.21	1.9	20	
Cobalt	53.5	1.0	48.54	4.808	100	75	125	53.88	0.6	20	
Lead	54.2	1.0	48.54	5.731	100	75	125	56.16	3.6	20	
Molybdenum	49.0	1.0	48.54	0.1205	101	75	125	49.18	0.4	20	
Selenium	47.9	1.0	48.54	0.1489	98	75	125	47.06	1.8	20	
Silver	24.3	1.0	24.27		100	75	125	24.79	2.1	20	
Uranium	48.7	1.0	48.54	0.5774	99	75	125	48.29	0.8	20	

Associated samples: **H14060105-007A, H14060105-007B, H14060105-010A, H14060105-010B, H14060105-013A, H14060105-013B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24962

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 43** SampType: **Method Blank** Lab ID: **MB-24962** Method: **SW6010B**
Analysis Date: **06/18/14 15:41** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1.0	0.3									
Arsenic	ND	0.4									
Beryllium	ND	0.009									
Boron	ND	0.1									
Cadmium	ND	0.01									
Nickel	ND	0.07									

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140618B: 44** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24962** Method: **SW6010B**
Analysis Date: **06/18/14 15:45** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	244	5.0	250	0.958	97	80	120				
Arsenic	50.3	1.0	50		101	80	120				
Beryllium	24.1	1.0	25		97	80	120				
Boron	51.2	1.0	50		102	80	120				
Cadmium	24.9	1.0	25		100	80	120				
Nickel	46.6	1.0	50		93	80	120				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140618B: 45** SampType: **Laboratory Control Sample** Lab ID: **LCS-24962** Method: **SW6010B**
Analysis Date: **06/18/14 15:49** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12100	5.0	14530	0.958	84	50.7	131.3				
Arsenic	290	1.8	338.9		86	72.3	106.4				
Beryllium	45.6	1.0	50.4		90	76.3	108.6				
Boron	77.5	1.0	92.09		84	59.4	101.9				
Cadmium	122	1.0	135.4		90	73	105.1				
Nickel	50.9	1.0	60.28		84	72.3	103.4				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24962

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 57** SampType: **Serial Dilution** Lab ID: **H14060105-011ADIL** Method: **SW6010B**
Analysis Date: **06/18/14 16:33** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3470	16				0	0	3375	2.7	10	
Arsenic	133	8.5				0	0	113.5	16	10	R
Beryllium	0.293	1.0				0	0	0.2375		10	N
Boron	2.72	2.4				0	0	2.317		10	N
Cadmium	1.35	1.0				0	0	1.463		10	N
Nickel	4.41	1.6				0	0	2.677		10	N

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140618B: 58** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-011APDS** Method: **SW6010B**
Analysis Date: **06/18/14 16:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4520	5.0	1211	3375	94	75	125				
Arsenic	353	1.7	242.3	113.5	99	75	125				
Beryllium	114	1.0	121.1	0.2375	94	75	125				
Boron	233	1.0	242.3	2.317	95	75	125				
Cadmium	119	1.0	121.1	1.463	97	75	125				
Nickel	248	1.0	242.3	2.677	101	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140618B: 59** SampType: **Sample Matrix Spike** Lab ID: **H14060105-011AMS** Method: **SW6010B**
Analysis Date: **06/18/14 16:41** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4310	5.0	235.8	3375		75	125				A
Arsenic	118	1.7	47.17	113.5	9	75	125				S
Beryllium	23.6	1.0	23.58	0.2375	99	75	125				
Boron	47.1	1.0	47.17	2.317	95	75	125				
Cadmium	28.4	1.0	23.58	1.463	114	75	125				
Nickel	51.4	1.0	47.17	2.677	103	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24962

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 60** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-011AMSD** Method: **SW6010B**

Analysis Date: **06/18/14 16:44** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4000	5.0	235.6	3375		75	125	4312	7.5	20	A
Arsenic	124	1.7	47.13	113.5	23	75	125	117.7	5.4	20	S
Beryllium	23.8	1.0	23.56	0.2375	100	75	125	23.58	0.8	20	
Boron	45.8	1.0	47.13	2.317	92	75	125	47.12	2.8	20	
Cadmium	24.3	1.0	23.56	1.463	97	75	125	28.36	15	20	
Nickel	51.3	1.0	47.13	2.677	103	75	125	51.45	0.2	20	

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24962

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 150** SampType: **Method Blank** Lab ID: **MB-24962** Method: **SW6020**
Analysis Date: **06/20/14 01:49** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.1	0.02									
Barium	0.10	0.08									
Cadmium	0.04	0.03									
Chromium	0.06	0.04									
Cobalt	ND	0.02									
Copper	0.1	0.1									
Molybdenum	ND	0.03									
Selenium	ND	0.07									
Uranium	ND	0.03									
Vanadium	ND	0.1									

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140619B: 151** SampType: **Laboratory Control Sample** Lab ID: **LCS-24962** Method: **SW6020**
Analysis Date: **06/20/14 01:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.9	1.0	126	0.1034	36	2.2	92.9				
Barium	640	1.0	614	0.09555	104	80.6	112.2				
Cadmium	121	1.0	137	0.0436	88	73	105.1				
Chromium	81.2	1.0	76	0.0568	107	72.8	109.1				
Cobalt	58.9	1.0	57.4		103	73.3	103.7				
Copper	303	1.0	280	0.15	108	77.5	109.6				
Molybdenum	166	1.0	172		97	68.6	105.8				
Selenium	194	1.0	196		99	72.5	112.2				
Uranium	124	1.0	100		124	80	120				S
Vanadium	70.3	1.0	73		96	66.6	107.3				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140619B: 152** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24962** Method: **SW6020**
Analysis Date: **06/20/14 01:57** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.2	1.0	50	0.1034	96	80	120				
Barium	48.7	1.0	50	0.09555	97	80	120				
Cadmium	25.1	1.0	25	0.0436	100	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24962

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 152** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-24962** Method: **SW6020**
Analysis Date: **06/20/14 01:57** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	51.5	1.0	50	0.0568	103	80	120				
Cobalt	49.9	1.0	50		100	80	120				
Copper	52.4	1.0	50	0.15	104	80	120				
Molybdenum	50.2	1.0	50		100	80	120				
Selenium	49.8	1.0	50		100	80	120				
Uranium	48.4	1.0	50		97	80	120				
Vanadium	50.4	1.0	50		101	80	120				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140619B: 158** SampType: **Sample Matrix Spike** Lab ID: **H14060105-011AMS** Method: **SW6020**
Analysis Date: **06/20/14 02:24** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	37.5	1.0	47.17	1.089	77	75	125				
Barium	143	1.0	47.17	49.15	198	75	125				S
Cadmium	24.2	1.0	23.58	1.258	97	75	125				
Chromium	55.8	1.0	47.17	6.849	104	75	125				
Cobalt	51.3	1.0	47.17	2.677	103	75	125				
Copper	407	1.0	47.17	807.1		75	125				A
Molybdenum	51.0	1.0	47.17	1.306	105	75	125				
Selenium	46.3	1.0	47.17	0.2568	98	75	125				
Uranium	49.6	1.0	47.17	3.017	99	75	125				
Vanadium	68.6	1.0	47.17	19.13	105	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140619B: 159** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-011AMSD** Method: **SW6020**
Analysis Date: **06/20/14 02:28** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	38.6	1.0	47.13	1.089	80	75	125	37.5	2.9	20	
Barium	109	1.0	47.13	49.15	128	75	125	142.7	26	20	SR
Cadmium	22.3	1.0	23.56	1.258	90	75	125	24.16	7.8	20	
Chromium	59.2	1.0	47.13	6.849	111	75	125	55.8	5.9	20	
Cobalt	51.3	1.0	47.13	2.677	103	75	125	51.32	0.1	20	
Copper	528	1.0	47.13	807.1		75	125	406.6	26	20	AR

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24962

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 159** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-011AMSD** Method: **SW6020**

Analysis Date: **06/20/14 02:28** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	49.9	1.0	47.13	1.306	103	75	125	51.04	2.2	20	
Selenium	46.4	1.0	47.13	0.2568	98	75	125	46.34	0.2	20	
Uranium	49.2	1.0	47.13	3.017	98	75	125	49.58	0.9	20	
Vanadium	68.8	1.0	47.13	19.13	105	75	125	68.58	0.3	20	

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25007

Date: *08-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 4** SampType: **Method Blank** Lab ID: **MB-25007** Method: **SW7471B**
Analysis Date: **06/20/14 10:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0006	0.0003									

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-25007** Method: **SW7471B**
Analysis Date: **06/20/14 10:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.6	0.50	5	0.000592	93	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 6** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25007** Method: **SW7471B**
Analysis Date: **06/20/14 10:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		100	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 10** SampType: **Sample Matrix Spike** Lab ID: **H14060105-008AMS** Method: **SW7471B**
Analysis Date: **06/20/14 11:02** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	0.9901	0.01396	101	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 11** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-008AMSD** Method: **SW7471B**
Analysis Date: **06/20/14 11:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.99	0.50	0.9852	0.01396	99	80	120	1.01	2.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25007

Date: *08-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 11** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-008AMSD** Method: **SW7471B**

Analysis Date: **06/20/14 11:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 29** SampType: **Sample Matrix Spike** Lab ID: **H14060106-024AMS** Method: **SW7471B**

Analysis Date: **06/20/14 11:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.5	0.50	1.005	0.4331	103	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **HGCV201-H_140620A: 30** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-024AMSD** Method: **SW7471B**

Analysis Date: **06/20/14 11:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	1.007	0.4331	86	80	120	1.464	12	20	

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25018

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140619A: 74** SampType: **Serial Dilution** Lab ID: **H14060105-012ADIL** Method: **SW6010B**
Analysis Date: **06/19/14 14:36** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	16.6	9.0				0	0	16.6		10	N
Iron	8590	15				0	0	8528	0.7	10	
Lead	19.2	16				0	0	29.48		10	N
Manganese	129	1.0				0	0	128.4	0.3	10	

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140619A: 75** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-012APDS** Method: **SW6010B**
Analysis Date: **06/19/14 14:39** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	242	1.9	257.5	16.6	87	75	125				
Iron	10600	5.0	1288	8528		75	125				A
Lead	250	3.3	257.5	29.48	86	75	125				
Manganese	1300	1.0	1288	128.4	91	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140619A: 76** SampType: **Sample Matrix Spike** Lab ID: **H14060105-012AMS** Method: **SW6010B**
Analysis Date: **06/19/14 14:43** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	72.3	1.8	48.64	16.6	114	75	125				
Iron	12900	5.0	243.2	8528		75	125				A
Lead	84.1	3.1	48.64	29.48	112	75	125				
Manganese	427	1.0	243.2	128.4	123	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140619A: 77** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-012AMSD** Method: **SW6010B**
Analysis Date: **06/19/14 14:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/17/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.5	1.8	48.64	16.6	62	75	125	72.27	43	20	SR
Iron	8440	5.0	243.2	8528		75	125	12880	42	20	AR
Lead	64.2	3.1	48.64	29.48	71	75	125	84.08	27	20	SR
Manganese	283	1.0	243.2	128.4	64	75	125	426.8	41	20	SR

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25018

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 86** SampType: **Method Blank** Lab ID: **MB-25018** Method: **SW6010B**
Analysis Date: **06/25/14 21:29** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									
Iron	7	0.6									
Lead	ND	0.6									
Manganese	0.1	0.02									

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140625A: 87** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25018** Method: **SW6010B**
Analysis Date: **06/25/14 21:33** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.4	1.0	50		99	80	120				
Iron	246	5.0	250	6.74	96	80	120				
Lead	48.8	1.0	50		98	80	120				
Manganese	240	1.0	250	0.1085	96	80	120				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140625A: 88** SampType: **Laboratory Control Sample** Lab ID: **LCS-25018** Method: **SW6010B**
Analysis Date: **06/25/14 21:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	294	1.7	343		86	72.3	106.4				
Iron	19100	5.0	23000	6.74	83	39.6	138.3				
Lead	186	3.1	187		99	75.9	108.6				
Manganese	379	1.0	369	0.1085	103	80.8	115.7				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140625A: 91** SampType: **Serial Dilution** Lab ID: **H14060105-011ADIL** Method: **SW6010B**
Analysis Date: **06/25/14 21:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	59.5	9.4				0	0	60.65		10	N
Iron	14200	15				0	0	13570	4.6	10	
Lead	164	17				0	0	152.5		10	N
Manganese	891	1.0				0	0	857.7	3.8	10	

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25018

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 94** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-011APDS** Method: **SW6010B**

Analysis Date: **06/25/14 21:59** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	317	1.9	268.2	60.65	96	75	125				
Iron	14700	5.0	1341	13570		75	125				A
Lead	414	3.4	268.2	152.5	97	75	125				
Manganese	2120	1.0	1341	857.7	94	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140625A: 95** SampType: **Sample Matrix Spike** Lab ID: **H14060105-011AMS** Method: **SW6010B**

Analysis Date: **06/25/14 22:03** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	129	1.9	52.63	60.65	129	75	125				S
Iron	12700	5.0	263.2	13570		75	125				A
Lead	171	3.4	52.63	152.5	34	75	125				S
Manganese	788	1.0	263.2	857.7	-26	75	125				S

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140625A: 96** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-011AMSD** Method: **SW6010B**

Analysis Date: **06/25/14 22:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	107	1.9	52.63	60.65	88	75	125	128.7	19	20	
Iron	15500	5.0	263.2	13570		75	125	12740	19	20	A
Lead	162	3.4	52.63	152.5	19	75	125	170.5	4.8	20	S
Manganese	674	1.0	263.2	857.7	-70	75	125	787.9	16	20	S

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25018

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 60** SampType: **Method Blank** Lab ID: **MB-25018** Method: **SW6020**
Analysis Date: **06/25/14 15:13** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.2									
Silver	ND	0.3									

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140625A: 61** SampType: **Laboratory Control Sample** Lab ID: **LCS-25018** Method: **SW6020**
Analysis Date: **06/25/14 15:18** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	195	1.0	187		104	75.9	108.6				
Silver	66.2	1.0	69		96	67.8	112.8				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140625A: 62** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25018** Method: **SW6020**
Analysis Date: **06/25/14 15:22** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	50.0	1.0	50		100	80	120				
Silver	24.2	1.0	25		97	80	120				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140625A: 66** SampType: **Serial Dilution** Lab ID: **H14060105-011ADIL** Method: **SW6020**
Analysis Date: **06/25/14 15:40** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	151	1.2				0	0	149.1	1.5	10	
Silver	ND	1.4				0	0	0.8039		10	

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140625A: 67** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-011APDS** Method: **SW6020**
Analysis Date: **06/25/14 15:44** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2600	1.0	2604	149.1	94	75	125				
Silver	1080	1.0	1302	0.8039	83	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25018

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 68** SampType: **Sample Matrix Spike** Lab ID: **H14060105-011AMS** Method: **SW6020**

Analysis Date: **06/25/14 15:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	143	1.0	52.63	149.1	-12	75	125				S
Silver	30.7	1.0	26.32	0.8039	113	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140625A: 69** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-011AMSD** Method: **SW6020**

Analysis Date: **06/25/14 15:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	149	1.0	52.63	149.1		75	125	142.8	4.4	20	S
Silver	28.9	1.0	26.32	0.8039	107	75	125	30.66	6.0	20	

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 98** SampType: **Method Blank** Lab ID: **MB-25045** Method: **SW6010B**
Analysis Date: **06/25/14 22:14** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Arsenic	ND	0.4									
Barium	0.08	0.02									
Beryllium	ND	0.009									
Boron	0.1	0.1									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	5	0.6									
Lead	ND	0.6									
Manganese	ND	0.02									
Nickel	ND	0.07									

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140625A: 99** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25045** Method: **SW6010B**
Analysis Date: **06/25/14 22:17** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	256	5.0	250		102	80	120				
Arsenic	50.3	1.0	50		101	80	120				
Barium	50.3	1.0	50	0.0765	100	80	120				
Beryllium	24.4	1.0	25		98	80	120				
Boron	51.4	1.0	50	0.112	103	80	120				
Cobalt	50.4	1.0	50		101	80	120				
Copper	50.6	1.0	50		101	80	120				
Iron	252	5.0	250	4.806	99	80	120				
Lead	50.8	1.0	50		102	80	120				
Manganese	245	1.0	250		98	80	120				
Nickel	50.8	1.0	50		102	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140625A: 100** SampType: **Laboratory Control Sample** Lab ID: **LCS-25045** Method: **SW6010B**
Analysis Date: **06/25/14 22:21** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13800	5.0	14700		94	50.7	131.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 100** SampType: **Laboratory Control Sample** Lab ID: **LCS-25045** Method: **SW6010B**

Analysis Date: **06/25/14 22:21** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	308	1.7	343		90	72.3	106.4				
Barium	596	1.0	614	0.0765	97	80.6	112.2				
Beryllium	46.1	1.0	51		90	76.3	108.6				
Boron	84.6	1.0	93.2	0.112	91	59.4	101.9				
Cobalt	53.9	1.0	57.4		94	73.3	103.7				
Copper	268	1.0	280		96	77.5	109.6				
Iron	19200	5.0	23000	4.806	83	39.6	138.3				
Lead	191	3.0	187		102	75.9	108.6				
Manganese	381	1.0	369		103	80.8	115.7				
Nickel	58.3	1.0	61		96	72.3	103.4				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140625A: 106** SampType: **Serial Dilution** Lab ID: **H14060105-012ADIL** Method: **SW6010B**

Analysis Date: **06/25/14 22:43** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	15000	15				0	0	14250	5.1	10	
Arsenic	28.6	8.3				0	0	31.58		10	N
Barium	150	1.0				0	0	142.3	5.1	10	
Beryllium	0.763	1.0				0	0	0.7954		10	N
Boron	5.93	2.4				0	0	3.413		10	N
Cobalt	3.41	2.6				0	0	4.05		10	N
Copper	335	5.1				0	0	315.5	6.0	10	
Iron	13500	14				0	0	12630	6.8	10	
Lead	56.1	15				0	0	57.11		10	N
Manganese	227	1.0				0	0	215.4	5.1	10	
Nickel	14.7	1.6				0	0	12.96		10	N

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140625A: 107** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-012APDS** Method: **SW6010B**

Analysis Date: **06/25/14 22:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	16000	5.0	1192	14250		75	125				A
Arsenic	244	1.7	238.4	31.58	89	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 107** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-012APDS** Method: **SW6010B**

Analysis Date: **06/25/14 22:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	370	1.0	238.4	142.3	95	75	125				
Beryllium	105	1.0	119.2	0.7954	87	75	125				
Boron	225	1.0	238.4	3.413	93	75	125				
Cobalt	214	1.0	238.4	4.05	88	75	125				
Copper	547	1.0	238.4	315.5	97	75	125				
Iron	13700	5.0	1192	12630		75	125				A
Lead	260	3.0	238.4	57.11	85	75	125				
Manganese	1240	1.0	1192	215.4	86	75	125				
Nickel	222	1.0	238.4	12.96	88	75	125				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140625A: 108** SampType: **Sample Matrix Spike** Lab ID: **H14060105-012AMS** Method: **SW6010B**

Analysis Date: **06/25/14 22:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	20500	5.0	233.6	14250		75	125				A
Arsenic	77.8	1.7	46.73	31.58	99	75	125				
Barium	197	1.0	46.73	142.3	117	75	125				
Beryllium	22.7	1.0	23.36	0.7954	94	75	125				
Boron	50.3	1.0	46.73	3.413	100	75	125				
Cobalt	48.4	1.0	46.73	4.05	95	75	125				
Copper	96.4	1.0	46.73	315.5		75	125				A
Iron	14500	5.0	233.6	12630		75	125				A
Lead	79.4	3.0	46.73	57.11	48	75	125				S
Manganese	470	1.0	233.6	215.4	109	75	125				
Nickel	58.6	1.0	46.73	12.96	98	75	125				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140625A: 109** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-012AMSD** Method: **SW6010B**

Analysis Date: **06/25/14 22:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	18800	5.0	229.4	14250		75	125	20460	8.7	20	A
Arsenic	71.3	1.7	45.87	31.58	87	75	125	77.85	8.8	20	
Barium	199	1.0	45.87	142.3	123	75	125	197	1.0	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 109** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-012AMSD** Method: **SW6010B**

Analysis Date: **06/25/14 22:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	22.0	1.0	22.94	0.7954	93	75	125	22.75	3.1	20	
Boron	47.8	1.0	45.87	3.413	97	75	125	50.28	5.0	20	
Cobalt	46.5	1.0	45.87	4.05	93	75	125	48.37	3.9	20	
Copper	88.8	1.0	45.87	315.5		75	125	96.36	8.1	20	A
Iron	13600	5.0	229.4	12630		75	125	14480	6.1	20	A
Lead	79.7	2.9	45.87	57.11	49	75	125	79.38	0.3	20	S
Manganese	427	1.0	229.4	215.4	92	75	125	470.3	9.7	20	
Nickel	55.2	1.0	45.87	12.96	92	75	125	58.57	5.9	20	

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 30** SampType: **Method Blank** Lab ID: **MB-25045** Method: **SW6020**
Analysis Date: **06/25/14 13:02** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	5	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Vanadium	ND	0.6									

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140625A: 31** SampType: **Laboratory Control Sample** Lab ID: **LCS-25045** Method: **SW6020**
Analysis Date: **06/25/14 13:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.1	1.0	126		39	2.2	92.9				
Arsenic	336	1.0	343		98	72.3	106.4				
Boron	91.5	4.2	93.2	4.602	93	59.4	101.9				
Cadmium	135	1.0	137		99	73	105.1				
Chromium	79.7	1.0	76		105	72.8	109.1				
Lead	199	1.0	187		107	75.9	108.6				
Molybdenum	157	1.0	172		91	68.6	105.8				
Selenium	211	1.0	196		108	72.5	112.2				
Silver	69.5	1.0	69		101	67.8	112.8				
Uranium	122	1.0	100		122	80	120				S
Vanadium	69.5	1.0	73		95	66.6	107.3				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140625A: 32** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25045** Method: **SW6020**
Analysis Date: **06/25/14 13:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.8	1.0	50		96	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 32** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25045** Method: **SW6020**
Analysis Date: **06/25/14 13:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.5	1.0	50		103	80	120				
Boron	54.4	4.5	50	4.602	100	80	120				
Cadmium	25.8	1.0	25		103	80	120				
Chromium	50.9	1.0	50		102	80	120				
Lead	49.4	1.0	50		99	80	120				
Molybdenum	47.5	1.0	50		95	80	120				
Selenium	54.8	1.0	50		110	80	120				
Silver	24.0	1.0	25		96	80	120				
Uranium	49.0	1.0	50		98	80	120				
Vanadium	49.4	1.0	50		99	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140625A: 37** SampType: **Serial Dilution** Lab ID: **H14060105-012ADIL** Method: **SW6020**
Analysis Date: **06/25/14 13:32** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1236		10	
Arsenic	34.8	1.5				0	0	35.74	2.6	10	
Boron	ND	21				0	0	4.146		10	
Cadmium	2.43	1.0				0	0	0.4988		10	N
Chromium	23.8	1.0				0	0	24.91	4.4	10	
Lead	59.7	1.1				0	0	59.28	0.7	10	
Molybdenum	ND	1.0				0	0	0.4241		10	
Selenium	ND	1.7				0	0	0.7113		10	
Silver	ND	1.2				0	0	0.3558		10	
Uranium	1.39	1.0				0	0	1.508		10	N
Vanadium	33.7	3.0				0	0	33.89	0.6	10	

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140625A: 38** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-012APDS** Method: **SW6020**
Analysis Date: **06/25/14 13:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2140	1.0	2315	0.1236	92	75	125				
Arsenic	2350	1.0	2315	35.74	100	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 38** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-012APDS** Method: **SW6020**

Analysis Date: **06/25/14 13:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2180	4.1	2315	4.146	94	75	125				
Cadmium	1060	1.0	1158	0.4988	92	75	125				
Chromium	2310	1.0	2315	24.91	98	75	125				
Lead	2230	1.0	2315	59.28	94	75	125				
Molybdenum	2150	1.0	2315	0.4241	93	75	125				
Selenium	2300	1.0	2315	0.7113	99	75	125				
Silver	920	1.0	1158	0.3558	79	75	125				
Uranium	2290	1.0	2315	1.508	99	75	125				
Vanadium	2300	1.0	2315	33.89	98	75	125				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140625A: 39** SampType: **Sample Matrix Spike** Lab ID: **H14060105-012AMS** Method: **SW6020**

Analysis Date: **06/25/14 13:41** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	14.1	1.0	46.73	0.1236	30	75	125				S
Arsenic	87.6	1.0	46.73	35.74	111	75	125				
Boron	74.3	4.2	46.73	4.146	150	75	125				S
Cadmium	24.8	1.0	23.36	0.4988	104	75	125				
Chromium	78.4	1.0	46.73	24.91	114	75	125				
Lead	87.2	1.0	46.73	59.28	60	75	125				S
Molybdenum	45.2	1.0	46.73	0.4241	96	75	125				
Selenium	53.4	1.0	46.73	0.7113	113	75	125				
Silver	26.3	1.0	23.36	0.3558	111	75	125				
Uranium	48.3	1.0	46.73	1.508	100	75	125				
Vanadium	84.7	1.0	46.73	33.89	109	75	125				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140625A: 40** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-012AMSD** Method: **SW6020**

Analysis Date: **06/25/14 13:45** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	12.0	1.0	45.87	0.1236	26	75	125	14.14	17	20	S
Arsenic	86.0	1.0	45.87	35.74	110	75	125	87.57	1.8	20	
Boron	59.3	4.1	45.87	4.146	120	75	125	74.28	22	20	R

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25045

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 40** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-012AMSD** Method: **SW6020**

Analysis Date: **06/25/14 13:45** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	25.2	1.0	22.94	0.4988	108	75	125	24.77	1.6	20	
Chromium	77.6	1.0	45.87	24.91	115	75	125	78.39	1.1	20	
Lead	89.1	1.0	45.87	59.28	65	75	125	87.17	2.1	20	S
Molybdenum	43.7	1.0	45.87	0.4241	94	75	125	45.19	3.3	20	
Selenium	53.2	1.0	45.87	0.7113	114	75	125	53.36	0.3	20	
Silver	24.3	1.0	22.94	0.3558	105	75	125	26.29	7.7	20	
Uranium	47.7	1.0	45.87	1.508	101	75	125	48.34	1.3	20	
Vanadium	84.4	1.0	45.87	33.89	110	75	125	84.72	0.3	20	

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICPMS204-B_140626B: 73** SampType: **Method Blank** Lab ID: **MB-25045** Method: **SW6020**

Analysis Date: **06/26/14 20:27** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Vanadium	ND	0.6									

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B, H14060105-012A, H14060105-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25132

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 152** SampType: **Serial Dilution** Lab ID: **H14060105-009ADIL** Method: **SW6010B**
Analysis Date: **07/01/14 23:12** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	1310	5.2				0	0	1208	8.0	10	
Iron	20200	14				0	0	17920	12	10	R

Associated samples: **H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140701B: 153** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-009APDS** Method: **SW6010B**
Analysis Date: **07/01/14 23:15** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	1470	1.1	245.2	1208		75	125				A
Iron	19800	5.0	1226	17920		75	125				A

Associated samples: **H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140701B: 154** SampType: **Sample Matrix Spike** Lab ID: **H14060105-009AMS** Method: **SW6010B**
Analysis Date: **07/01/14 23:19** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	1240	1.1	50.51	1208		75	125				A
Iron	19500	5.0	252.5	17920		75	125				A

Associated samples: **H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140701B: 155** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-009AMSD** Method: **SW6010B**
Analysis Date: **07/01/14 23:22** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	1190	1.1	48.54	1208		75	125	1236	3.9	20	A
Iron	18700	5.0	242.7	17920		75	125	19480	4.3	20	A

Associated samples: **H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140702A: 164** SampType: **Method Blank** Lab ID: **MB-25132** Method: **SW6010B**
Analysis Date: **07/02/14 23:43** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.2									
Iron	4	0.6									

Associated samples: **H14060105-012A, H14060105-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25132

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 167** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25132** Method: **SW6010B**

Analysis Date: **07/02/14 23:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	50.1	1.0	50		100	80	120				
Iron	235	5.0	250	4.237	92	80	120				

Associated samples: **H14060105-012A, H14060105-012B**

Run ID :Run Order: **ICP2-HE_140702A: 168** SampType: **Laboratory Control Sample** Lab ID: **LCS-25132** Method: **SW6010B**

Analysis Date: **07/02/14 23:58** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	256	1.1	280		92	77.5	109.6				
Iron	18700	5.0	23000	4.237	81	39.6	138.3				

Associated samples: **H14060105-012A, H14060105-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25132

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140701A: 33** SampType: **Method Blank** Lab ID: **MB-25132** Method: **SW6020**
Analysis Date: **07/01/14 13:02** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	ND	0.2									

Associated samples: **H14060105-009A, H14060105-009B**

Run ID :Run Order: **ICPMS204-B_140701A: 34** SampType: **Laboratory Control Sample** Lab ID: **LCS-25132** Method: **SW6020**
Analysis Date: **07/01/14 13:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	120	1.0	100		120	80	120				

Associated samples: **H14060105-009A, H14060105-009B**

Run ID :Run Order: **ICPMS204-B_140701A: 35** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25132** Method: **SW6020**
Analysis Date: **07/01/14 13:11** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	49.2	1.0	50		98	80	120				

Associated samples: **H14060105-009A, H14060105-009B**

Run ID :Run Order: **ICPMS204-B_140701A: 38** SampType: **Serial Dilution** Lab ID: **H14060105-009ADIL** Method: **SW6020**
Analysis Date: **07/01/14 13:24** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	7.88	1.0				0	0	7.757		10	N

Associated samples: **H14060105-009A, H14060105-009B**

Run ID :Run Order: **ICPMS204-B_140701A: 39** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-009APDS** Method: **SW6020**
Analysis Date: **07/01/14 13:28** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	2420	1.0	2500	7.757	97	75	125				

Associated samples: **H14060105-009A, H14060105-009B**

Run ID :Run Order: **ICPMS204-B_140701A: 40** SampType: **Sample Matrix Spike** Lab ID: **H14060105-009AMS** Method: **SW6020**
Analysis Date: **07/01/14 13:32** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	54.7	1.0	47.62	7.757	99	75	125				

Associated samples: **H14060105-009A, H14060105-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25132

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140701A: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-009AMSD** Method: **SW6020**

Analysis Date: **07/01/14 13:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	55.5	1.0	48.54	7.757	**98**	75	125	54.67	**1.5**	20	

Associated samples: **H14060105-009A, H14060105-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25134

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 164** SampType: **Serial Dilution** Lab ID: **H14060105-011ADIL** Method: **SW6010B**
Analysis Date: **07/01/14 23:55** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	73.4	1.0				0	0	63.91	14	10	R
Copper	617	5.7				0	0	539.1	13	10	R
Zinc	1130	2.4				0	0	1008	12	10	R

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140701B: 165** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060105-011APDS** Method: **SW6010B**
Analysis Date: **07/01/14 23:59** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	320	1.0	268.2	63.91	96	75	125				
Copper	827	1.2	268.2	539.1	107	75	125				
Zinc	1340	1.0	268.2	1008	124	75	125				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140701B: 166** SampType: **Sample Matrix Spike** Lab ID: **H14060105-011AMS** Method: **SW6010B**
Analysis Date: **07/02/14 00:03** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	110	1.0	49.5	63.91	93	75	125				
Copper	462	1.1	49.5	539.1		75	125				A
Zinc	488	1.0	49.5	1008		75	125				A

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140701B: 167** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-011AMSD** Method: **SW6010B**
Analysis Date: **07/02/14 00:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	94.9	1.0	48.54	63.91	64	75	125	109.8	15	20	S
Copper	643	1.1	48.54	539.1		75	125	462.5	33	20	AR
Zinc	571	1.0	48.54	1008		75	125	488.4	16	20	A

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25134

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 176** SampType: **Method Blank** Lab ID: **MB-25134** Method: **SW6010B**
Analysis Date: **07/03/14 00:27** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.02	0.02									
Copper	ND	0.2									
Zinc	0.3	0.09									

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140702A: 179** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25134** Method: **SW6010B**
Analysis Date: **07/03/14 00:38** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	51.0	1.0	50	0.024	102	80	120				
Copper	51.0	1.0	50		102	80	120				
Zinc	46.9	1.0	50	0.2865	93	80	120				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140702A: 180** SampType: **Laboratory Control Sample** Lab ID: **LCS-25134** Method: **SW6010B**
Analysis Date: **07/03/14 00:42** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	572	1.0	614	0.024	93	80.6	112.2				
Copper	254	1.1	280		91	77.5	109.6				
Zinc	184	1.0	213	0.2865	86	74.2	109.9				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97712

Date: *08-Jul-14*

Run ID :Run Order: **PHSC_101-H_140605A: 68** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **06/05/14 10:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2	0.9									

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **PHSC_101-H_140605A: 70** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **06/05/14 11:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	590	4.0	600	2.45	97	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **PHSC_101-H_140605A: 73** SampType: **Sample Duplicate** Lab ID: **H14050430-003ADUP** Method: **A2320 B**
Analysis Date: **06/05/14 11:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2.4	4.0						2.35		10	
Bicarbonate as HCO3	2.3	4.0						2.257		10	

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **PHSC_101-H_140605A: 77** SampType: **Sample Matrix Spike** Lab ID: **H14060078-001AMS** Method: **A2320 B**
Analysis Date: **06/05/14 11:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	770	4.0	600	193	97	80	120				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **PHSC_101-H_140605A: 112** SampType: **Sample Duplicate** Lab ID: **H14060106-007ADUP** Method: **A2320 B**
Analysis Date: **06/05/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	93	4.0						92.45	0.2	10	
Bicarbonate as HCO3	110	4.0						112.2	0.2	10	

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97740

Date: *08-Jul-14*

Run ID :Run Order: **FIA203-HE_140605B: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **06/05/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.994	0.010	1		99	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **06/05/14 12:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.952	0.011	1		95	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **06/05/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	-0.00565	0.010				0	0				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **06/05/14 12:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	ND	0.001									

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 41** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **06/05/14 12:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.466	0.010	0.5		93	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 45** SampType: **Sample Matrix Spike** Lab ID: **H14060101-001CMS** Method: **E353.2**
Analysis Date: **06/05/14 12:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.953	0.011	1	0.04924	90	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97740

Date: *08-Jul-14*

Run ID :Run Order: **FIA203-HE_140605B: 46** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060101-001CMSD** Method: **E353.2**

Analysis Date: **06/05/14 12:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.968	0.011	1	0.04924	92	90	110	0.9532	1.6	20	

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 57** SampType: **Sample Matrix Spike** Lab ID: **H14060106-001DMS** Method: **E353.2**

Analysis Date: **06/05/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.17	0.011	1	0.2417	93	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140605B: 58** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-001DMSD** Method: **E353.2**

Analysis Date: **06/05/14 13:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.19	0.011	1	0.2417	95	90	110	1.169	1.9	20	

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97753

Date: *08-Jul-14*

Run ID :Run Order: **IC102-H_140605A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **06/05/14 14:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		105	90	110				
Sulfate	420	1.0	400		106	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **IC102-H_140605A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **06/05/14 14:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	0.02	0.008									
Sulfate	ND	0.08									

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **IC102-H_140605A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **06/05/14 14:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	46	1.0	50	0.022	92	90	110				
Sulfate	190	1.0	200		96	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **IC102-H_140605A: 16** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV060514-1** Method: **E300.0**
Analysis Date: **06/05/14 15:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	420	1.0	400		106	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **IC102-H_140605A: 19** SampType: **Sample Matrix Spike** Lab ID: **H14060104-001AMS** Method: **E300.0**
Analysis Date: **06/05/14 15:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	58	1.0	50	9.446	98	90	110				
Sulfate	220	1.0	200	19.87	103	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97753

Date: *08-Jul-14*

Run ID :Run Order: **IC102-H_140605A: 20** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060104-001AMSD** Method: **E300.0**

Analysis Date: **06/05/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	59	1.0	50	9.446	**99**	90	110	58.42	**0.9**	20	
Sulfate	230	1.0	200	19.87	**103**	90	110	224.9	**0.6**	20	

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**
Analysis Date: **06/05/14 12:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.791	0.10	0.8		99	95	105				
Potassium	40.2	1.0	40		100	95	105				
Sodium	40.5	1.0	40		101	95	105				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICP2-HE_140605C: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**
Analysis Date: **06/05/14 12:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.43	0.10	2.5		97	95	105				
Potassium	24.7	1.0	25		99	95	105				
Sodium	24.9	1.0	25		99	95	105				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICP2-HE_140605C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **06/05/14 12:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.000910	0.10				0	0				
Potassium	-0.0615	1.0				0	0				
Sodium	0.0160	1.0				0	0				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICP2-HE_140605C: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **06/05/14 12:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.991	0.10	1		99	80	120				
Potassium	20.1	1.0	20		100	80	120				
Sodium	20.2	1.0	20		101	80	120				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**
Analysis Date: **06/05/14 12:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICP2-HE_140605C: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**
Analysis Date: **06/05/14 12:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.945	0.10	1		95	85	115				
Potassium	47.6	1.0	50		95	85	115				
Sodium	48.0	1.0	50		96	85	115				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICP2-HE_140605C: 30** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **06/05/14 15:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.50	0.10	2.5		100	90	110				
Potassium	24.5	1.0	25		98	90	110				
Sodium	24.6	1.0	25		98	90	110				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICP2-HE_140605C: 32** SampType: **Sample Matrix Spike** Lab ID: **H14060078-001BMS2** Method: **E200.7**
Analysis Date: **06/05/14 15:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.12	0.050	1	0.1186	100	70	130				
Potassium	56.8	1.0	50	7.011	100	70	130				
Sodium	73.0	1.0	50	22.9	100	70	130				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060078-001BMSD2** Method: **E200.7**

Analysis Date: **06/05/14 15:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.06	0.050	1	0.1186	94	70	130	1.121	5.9	20	
Potassium	56.8	1.0	50	7.011	99	70	130	56.81	0.1	20	
Sodium	73.2	1.0	50	22.9	100	70	130	73.02	0.2	20	

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97792

Date: *08-Jul-14*

Run ID :Run Order: **FIA202-HE_140606A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**

Analysis Date: **06/06/14 10:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.256	0.010	0.25		103	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA202-HE_140606A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**

Analysis Date: **06/06/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0910	0.010	0.1		91	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA202-HE_140606A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**

Analysis Date: **06/06/14 10:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-0.000970	0.010				0	0				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97804

Date: *08-Jul-14*

Run ID :Run Order: **FIA203-HE_140606E: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **06/06/14 14:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	15.1	0.50	15.2		99	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **06/06/14 14:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.997	0.055	1		100	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **06/06/14 14:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.467	0.050	0.5		93	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **06/06/14 14:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0517	0.050				0	0				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 20** SampType: **Sample Matrix Spike** Lab ID: **H14060105-001DMS** Method: **E350.1**
Analysis Date: **06/06/14 15:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.959	0.055	1		96	80	120				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 21** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-001DMSD** Method: **E350.1**
Analysis Date: **06/06/14 15:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.00	0.055	1		100	80	120	0.9585	4.4	10	

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97804

Date: *08-Jul-14*

Run ID :Run Order: **FIA203-HE_140606E: 23** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**

Analysis Date: **06/06/14 15:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.463	0.050	0.5		93	90	110				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 26** SampType: **Sample Matrix Spike** Lab ID: **H14060105-003DMS** Method: **E350.1**

Analysis Date: **06/06/14 15:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.900	0.055	1		90	80	120				

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Run ID :Run Order: **FIA203-HE_140606E: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-003DMSD** Method: **E350.1**

Analysis Date: **06/06/14 15:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.930	0.055	1		93	80	120	0.8996	3.3	10	

Associated samples: **H14060105-001D, H14060105-002D, H14060105-003D, H14060105-004D, H14060105-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97835

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140606C: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/06/14 13:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.07	0.10	4		102	95	105				
Boron	0.794	0.10	0.8		99	95	105				
Calcium	39.7	1.0	40		99	95	105				
Iron	3.97	0.020	4		99	95	105				
Magnesium	40.0	1.0	40		100	95	105				
Potassium	40.4	1.0	40		101	95	105				
Sodium	40.8	1.0	40		102	95	105				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICP2-HE_140606C: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **06/06/14 14:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.55	0.10	2.5		102	95	105				
Boron	2.48	0.10	2.5		99	95	105				
Calcium	25.3	1.0	25		101	95	105				
Iron	2.52	0.020	2.5		101	95	105				
Magnesium	25.7	1.0	25		103	95	105				
Potassium	25.8	1.0	25		103	95	105				
Sodium	25.9	1.0	25		103	95	105				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICP2-HE_140606C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/06/14 14:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	532	0.10	500		106	80	120				
Boron	0.00673	0.10				0	0				
Calcium	477	1.0	500		95	80	120				
Iron	187	0.020	200		93	80	120				
Magnesium	521	1.0	500		104	80	120				
Potassium	-0.115	1.0				0	0				
Sodium	-0.0125	1.0				0	0				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97835

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140606C: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/06/14 14:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	521	0.10	500		104	80	120				
Boron	0.962	0.10	1		96	80	120				
Calcium	461	1.0	500		92	80	120				
Iron	186	0.020	200		93	80	120				
Magnesium	517	1.0	500		103	80	120				
Potassium	19.8	1.0	20		99	80	120				
Sodium	20.0	1.0	20		100	80	120				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Run ID :Run Order: **ICP2-HE_140606C: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **06/06/14 14:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.54	0.10	2.5		102	90	110				
Boron	2.33	0.10	2.5		93	90	110				
Calcium	25.3	1.0	25		101	90	110				
Iron	2.51	0.020	2.5		100	90	110				
Magnesium	25.8	1.0	25		103	90	110				
Potassium	25.5	1.0	25		102	90	110				
Sodium	25.6	1.0	25		102	90	110				

Associated samples: **H14060105-001C, H14060105-002C, H14060105-003C, H14060105-004C, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97845

Date: *08-Jul-14*

Run ID :Run Order: **FIA203-HE_140609B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **06/09/14 12:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0392	0.10				0	0				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **FIA203-HE_140609B: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **06/09/14 12:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.520	0.10	0.5		104	90	110				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 17** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **06/09/14 13:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	ND	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	ND	3E-05									
Iron	0.002	0.0002									
Lead	ND	8E-06									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	ND	0.0003									

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140609A: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **06/09/14 13:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0513	0.10	0.05		103	85	115				
Antimony	0.0508	0.050	0.05		102	85	115				
Arsenic	0.0529	0.0050	0.05		106	85	115				
Barium	0.0505	0.10	0.05		101	85	115				
Beryllium	0.0527	0.0010	0.05		105	85	115				
Cadmium	0.0524	0.0010	0.05		105	85	115				
Chromium	0.0508	0.010	0.05		102	85	115				
Cobalt	0.0511	0.010	0.05		102	85	115				
Copper	0.0518	0.010	0.05		104	85	115				
Iron	0.158	0.020	0.15	0.001538	104	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **06/09/14 13:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0509	0.010	0.05		102	85	115				
Manganese	0.0516	0.010	0.05		103	85	115				
Molybdenum	0.0504	0.0050	0.05		101	85	115				
Selenium	0.0534	0.0050	0.05		107	85	115				
Silver	0.0192	0.0050	0.02		96	85	115				
Uranium	0.0485	0.0010	0.05		97	85	115				
Vanadium	0.0501	0.10	0.05		100	85	115				
Zinc	0.0540	0.010	0.05		108	85	115				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140609A: 61** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **06/09/14 16:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.303	0.10	0.3		101	90	110				
Antimony	0.0599	0.050	0.06		100	90	110				
Arsenic	0.0603	0.0050	0.06		100	90	110				
Barium	0.0600	0.10	0.06		100	90	110				
Beryllium	0.0299	0.0010	0.03		100	90	110				
Cadmium	0.0319	0.0010	0.03		106	90	110				
Chromium	0.0606	0.010	0.06		101	90	110				
Cobalt	0.0595	0.010	0.06		99	90	110				
Copper	0.0622	0.010	0.06		104	90	110				
Iron	0.310	0.020	0.3		103	90	110				
Lead	0.0594	0.010	0.06		99	90	110				
Manganese	0.296	0.010	0.3		99	90	110				
Molybdenum	0.0604	0.0050	0.06		101	90	110				
Nickel	0.0609	0.010	0.06		101	90	110				
Potassium	3.04	0.50	3		101	90	110				
Selenium	0.0617	0.0050	0.06		103	90	110				
Silver	0.0305	0.0050	0.03		102	90	110				
Uranium	0.0590	0.0010	0.06		98	90	110				
Vanadium	0.0589	0.10	0.06		98	90	110				
Zinc	0.0617	0.010	0.06		103	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 61** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **06/09/14 16:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140609A: 62** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/09/14 16:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.9	0.10	40		95	70	130				
Antimony	9.30E-05	0.050									
Arsenic	0.000196	0.0050									
Barium	0.000149	0.10									
Beryllium	1.90E-05	0.0010									
Cadmium	0.000277	0.0010									
Chromium	0.00108	0.010									
Cobalt	0.000147	0.010									
Copper	0.000360	0.010									
Iron	96.0	0.020	100		96	70	130				
Lead	0.000246	0.010									
Manganese	-2.70E-05	0.010									
Molybdenum	0.822	0.0050	0.8		103	70	130				
Nickel	-0.000608	0.010									
Potassium	38.6	0.50	40		97	70	130				
Selenium	0.000699	0.0050									
Silver	0.000287	0.0050									
Uranium	6.10E-05	0.0010									
Vanadium	6.90E-05	0.10									
Zinc	0.00168	0.010									

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140609A: 63** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/09/14 16:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.7	0.10	40		97	70	130				
Antimony	0.000145	0.050				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 63** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/09/14 16:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0107	0.0050	0.01		107	70	130				
Barium	0.000199	0.10				0	0				
Beryllium	1.00E-05	0.0010				0	0				
Cadmium	0.00961	0.0010	0.01		96	70	130				
Chromium	0.0218	0.010	0.02		109	70	130				
Cobalt	0.0196	0.010	0.02		98	70	130				
Copper	0.0213	0.010	0.02		106	70	130				
Iron	99.0	0.020	100		99	70	130				
Lead	0.000349	0.010				0	0				
Manganese	0.0193	0.010	0.02		96	70	130				
Molybdenum	0.838	0.0050	0.8		105	70	130				
Nickel	0.0200	0.010	0.02		100	70	130				
Potassium	40.7	0.50	40		102	70	130				
Selenium	0.0105	0.0050	0.01		105	70	130				
Silver	0.0185	0.0050	0.02		92	70	130				
Uranium	7.80E-05	0.0010				0	0				
Vanadium	0.0206	0.10	0.02		103	70	130				
Zinc	0.0113	0.010	0.01		113	70	130				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140609A: 152** SampType: **Sample Matrix Spike** Lab ID: **H14060052-005GMS** Method: **E200.8**

Analysis Date: **06/09/14 23:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0786	0.030	0.05	0.03058	96	70	130				
Antimony	0.0525	0.0010	0.05	0.0001883	105	70	130				
Arsenic	0.0604	0.0010	0.05	0.0002118	120	70	130				
Barium	0.666	0.050	0.05	0.6223		70	130				A
Beryllium	0.0498	0.0010	0.05	0.0000478	99	70	130				
Cadmium	0.0504	0.0010	0.05	0.0000061	101	70	130				
Chromium	0.0510	0.0050	0.05	0.0001205	102	70	130				
Cobalt	0.0502	0.0050	0.05	0.0002061	100	70	130				
Copper	0.0524	0.0050	0.05	0.0000565	105	70	130				
Iron	1.29	0.020	0.15	1.143		70	130				A

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 152** SampType: **Sample Matrix Spike** Lab ID: **H14060052-005GMS** Method: **E200.8**

Analysis Date: **06/09/14 23:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0514	0.0010	0.05	0.0001927	102	70	130				
Manganese	0.601	0.0010	0.05	0.5557		70	130				A
Molybdenum	0.0532	0.0010	0.05	0.0012	104	70	130				
Selenium	0.0678	0.0010	0.05	0.0003804	135	70	130				S
Silver	0.0154	0.0010	0.02		77	70	130				
Uranium	0.0598	0.00030	0.05	0.007544	105	70	130				
Vanadium	0.0508	0.010	0.05	0.0001816	101	70	130				
Zinc	0.0525	0.010	0.05	0.001918	101	70	130				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140609A: 153** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060052-005GMSD** Method: **E200.8**

Analysis Date: **06/09/14 23:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0780	0.030	0.05	0.03058	95	70	130	0.07859	0.8	20	
Antimony	0.0512	0.0010	0.05	0.0001883	102	70	130	0.05249	2.4	20	
Arsenic	0.0601	0.0010	0.05	0.0002118	120	70	130	0.0604	0.4	20	
Barium	0.662	0.050	0.05	0.6223		70	130	0.6665	0.7	20	A
Beryllium	0.0480	0.0010	0.05	0.0000478	96	70	130	0.04977	3.6	20	
Cadmium	0.0495	0.0010	0.05	0.0000061	99	70	130	0.05035	1.6	20	
Chromium	0.0508	0.0050	0.05	0.0001205	101	70	130	0.051	0.5	20	
Cobalt	0.0484	0.0050	0.05	0.0002061	96	70	130	0.05019	3.6	20	
Copper	0.0521	0.0050	0.05	0.0000565	104	70	130	0.05235	0.4	20	
Iron	1.30	0.020	0.15	1.143		70	130	1.286	0.9	20	A
Lead	0.0510	0.0010	0.05	0.0001927	102	70	130	0.05142	0.8	20	
Manganese	0.584	0.0010	0.05	0.5557		70	130	0.6007	2.8	20	A
Molybdenum	0.0528	0.0010	0.05	0.0012	103	70	130	0.05316	0.8	20	
Selenium	0.0678	0.0010	0.05	0.0003804	135	70	130	0.06781	0.1	20	S
Silver	0.0151	0.0010	0.02		75	70	130	0.01539	2.0	20	
Uranium	0.0591	0.00030	0.05	0.007544	103	70	130	0.05981	1.1	20	
Vanadium	0.0506	0.010	0.05	0.0001816	101	70	130	0.05081	0.4	20	
Zinc	0.0515	0.010	0.05	0.001918	99	70	130	0.0525	1.9	20	

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 223** SampType: **Sample Matrix Spike** Lab ID: **H14050522-001BMS** Method: **E200.8**

Analysis Date: **06/10/14 04:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 17	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.265	0.030	0.25	0.02641	95	70	130				
Antimony	0.260	0.0010	0.25	0.00189	103	70	130				
Arsenic	0.271	0.0010	0.25	0.0007155	108	70	130				
Barium	0.285	0.050	0.25	0.02582	103	70	130				
Beryllium	0.239	0.0010	0.25		96	70	130				
Cadmium	0.240	0.0010	0.25	0.000044	96	70	130				
Chromium	0.261	0.0050	0.25	0.001792	104	70	130				
Cobalt	0.246	0.0050	0.25		98	70	130				
Copper	0.263	0.0050	0.25	0.000334	105	70	130				
Iron	0.800	0.020	0.75	0.04783	100	70	130				
Lead	0.255	0.0010	0.25	0.0001105	102	70	130				
Manganese	0.260	0.0010	0.25	0.01024	100	70	130				
Molybdenum	0.261	0.0010	0.25	0.0006345	104	70	130				
Selenium	0.258	0.0010	0.25	0.00132	103	70	130				
Uranium	0.266	0.00030	0.25	0.0002345	106	70	130				
Vanadium	0.271	0.010	0.25	0.00881	105	70	130				
Zinc	0.261	0.010	0.25	0.01082	100	70	130				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140609A: 224** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14050522-001BMSD** Method: **E200.8**

Analysis Date: **06/10/14 04:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 17	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.266	0.030	0.25	0.02641	96	70	130	0.2652	0.2	20	
Antimony	0.260	0.0010	0.25	0.00189	103	70	130	0.2603	0.3	20	
Arsenic	0.275	0.0010	0.25	0.0007155	110	70	130	0.2714	1.2	20	
Barium	0.284	0.050	0.25	0.02582	103	70	130	0.2845	0.1	20	
Beryllium	0.240	0.0010	0.25		96	70	130	0.2393	0.2	20	
Cadmium	0.242	0.0010	0.25	0.000044	97	70	130	0.2398	0.9	20	
Chromium	0.263	0.0050	0.25	0.001792	104	70	130	0.2606	0.8	20	
Cobalt	0.245	0.0050	0.25		98	70	130	0.2458	0.2	20	
Copper	0.267	0.0050	0.25	0.000334	107	70	130	0.2629	1.5	20	
Iron	0.791	0.020	0.75	0.04783	99	70	130	0.8005	1.1	20	
Lead	0.259	0.0010	0.25	0.0001105	104	70	130	0.2552	1.5	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 224** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14050522-001BMSD** Method: **E200.8**

Analysis Date: **06/10/14 04:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 17	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.262	0.0010	0.25	0.01024	101	70	130	0.2601	0.6	20	
Molybdenum	0.262	0.0010	0.25	0.0006345	105	70	130	0.2609	0.6	20	
Selenium	0.258	0.0010	0.25	0.00132	103	70	130	0.2584	0.1	20	
Uranium	0.272	0.00030	0.25	0.0002345	109	70	130	0.2664	2.1	20	
Vanadium	0.274	0.010	0.25	0.00881	106	70	130	0.2712	1.0	20	
Zinc	0.264	0.010	0.25	0.01082	101	70	130	0.2613	0.9	20	

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140609A: 237** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/10/14 05:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.2	0.10	40		96	70	130				
Antimony	8.70E-05	0.050									
Arsenic	0.000225	0.0050									
Barium	0.000160	0.10									
Beryllium	9.00E-06	0.0010									
Cadmium	0.000277	0.0010									
Chromium	0.00114	0.010									
Cobalt	9.90E-05	0.010									
Copper	0.000382	0.010									
Iron	96.6	0.020	100		97	70	130				
Lead	0.000229	0.010									
Manganese	-0.000109	0.010									
Molybdenum	0.847	0.0050	0.8		106	70	130				
Nickel	-0.00186	0.010									
Potassium	38.5	0.50	40		96	70	130				
Selenium	0.000949	0.0050									
Silver	0.000608	0.0050									
Uranium	1.00E-05	0.0010									
Vanadium	4.50E-05	0.10									
Zinc	0.00161	0.010									

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97879

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140609A: 238** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/10/14 05:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	39.3	0.10	40		98	70	130				
Antimony	0.000145	0.050				0	0				
Arsenic	0.0115	0.0050	0.01		115	70	130				
Barium	0.000238	0.10				0	0				
Beryllium	1.10E-05	0.0010				0	0				
Cadmium	0.00955	0.0010	0.01		96	70	130				
Chromium	0.0226	0.010	0.02		113	70	130				
Cobalt	0.0192	0.010	0.02		96	70	130				
Copper	0.0224	0.010	0.02		112	70	130				
Iron	101	0.020	100		101	70	130				
Lead	0.000332	0.010				0	0				
Manganese	0.0190	0.010	0.02		95	70	130				
Molybdenum	0.865	0.0050	0.8		108	70	130				
Nickel	0.0199	0.010	0.02		99	70	130				
Potassium	41.5	0.50	40		104	70	130				
Selenium	0.0114	0.0050	0.01		114	70	130				
Silver	0.0162	0.0050	0.02		81	70	130				
Uranium	6.30E-05	0.0010				0	0				
Vanadium	0.0214	0.10	0.02		107	70	130				
Zinc	0.0118	0.010	0.01		118	70	130				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-004C, H14060105-005B, H14060105-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97907

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140610B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **06/11/14 01:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.0614	0.010	0.06		102	90	110				
Uranium	0.0604	0.0010	0.06		101	90	110				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-005B, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140610B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **06/11/14 01:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.000626	0.010									
Uranium	4.90E-05	0.0010									

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-005B, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140610B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **06/11/14 01:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.0208	0.010	0.02		104	70	130				
Uranium	6.90E-05	0.0010				0	0				

Associated samples: **H14060105-001B, H14060105-001C, H14060105-002B, H14060105-002C, H14060105-003B, H14060105-003C, H14060105-004B, H14060105-005B, H14060105-005C**

Run ID :Run Order: **ICPMS204-B_140610B: 16** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**
Analysis Date: **06/11/14 01:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	ND	6E-05									
Uranium	ND	6E-06									

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140610B: 17** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**
Analysis Date: **06/11/14 01:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.0521	0.010	0.05		104	85	115				
Uranium	0.0490	0.0010	0.05		98	85	115				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97907

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140610B: 64** SampType: **Sample Matrix Spike** Lab ID: **H14060105-002BMS** Method: **E200.8**

Analysis Date: **06/11/14 05:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.0530	0.0050	0.05	0.0003937	105	70	130				
Uranium	0.0505	0.00030	0.05	0.00118	99	70	130				

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Run ID :Run Order: **ICPMS204-B_140610B: 65** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-002BMSD** Method: **E200.8**

Analysis Date: **06/11/14 05:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.0522	0.0050	0.05	0.0003937	104	70	130	0.05298	1.4	20	
Uranium	0.0500	0.00030	0.05	0.00118	98	70	130	0.05047	0.9	20	

Associated samples: **H14060105-001B, H14060105-002B, H14060105-003B, H14060105-004B, H14060105-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98098

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/18/14 12:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.05	0.10	4		101	90	110				
Arsenic	0.852	0.0085	0.8		107	90	110				
Barium	0.795	0.10	0.8		99	90	110				
Beryllium	0.402	0.0010	0.4		101	90	110				
Boron	0.851	0.10	0.8		106	90	110				
Cadmium	0.419	0.0010	0.4		105	90	110				
Chromium	0.795	0.010	0.8		99	90	110				
Copper	0.805	0.010	0.8		101	90	110				
Iron	3.95	0.020	4		99	90	110				
Lead	0.872	0.010	0.8		109	90	110				
Manganese	4.00	0.010	4		100	90	110				
Nickel	0.789	0.010	0.8		99	90	110				
Vanadium	0.813	0.10	0.8		102	90	110				
Zinc	0.858	0.010	0.8		107	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140618B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/18/14 12:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	527	0.10	500		105	80	120				
Arsenic	0.00228	0.0085				0	0				
Barium	0.000290	0.10				0	0				
Beryllium	ND	0.0010				0	0				
Boron	0.00189	0.10				0	0				
Cadmium	0.00451	0.0010				0	0				
Chromium	0.00957	0.013				0	0				
Copper	0.00111	0.010				0	0				
Iron	183	0.020	200		92	80	120				
Lead	0.0189	0.010				0	0				
Manganese	-0.00617	0.010				0	0				
Nickel	0.00681	0.010				0	0				
Vanadium	0.00140	0.10				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98098

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140618B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/18/14 12:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.00534	0.010				0	0				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140618B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/18/14 12:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	522	0.10	500		104	80	120				
Arsenic	1.05	0.0085	1		105	80	120				
Barium	0.518	0.10	0.5		104	80	120				
Beryllium	0.499	0.0010	0.5		100	80	120				
Boron	1.07	0.10	1		107	80	120				
Cadmium	0.981	0.0010	1		98	80	120				
Chromium	0.495	0.013	0.5		99	80	120				
Copper	0.525	0.010	0.5		105	80	120				
Iron	184	0.020	200		92	80	120				
Lead	0.997	0.010	1		100	80	120				
Manganese	0.480	0.010	0.5		96	80	120				
Nickel	0.931	0.010	1		93	80	120				
Vanadium	0.495	0.10	0.5		99	80	120				
Zinc	1.08	0.010	1		108	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98176

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140619B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/19/14 12:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0604	0.0010	0.06		101	90	110				
Arsenic	0.0604	0.0010	0.06		101	90	110				
Barium	0.0607	0.0010	0.06		101	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Chromium	0.0609	0.0010	0.06		102	90	110				
Cobalt	0.0607	0.0010	0.06		101	90	110				
Copper	0.0624	0.0010	0.06		104	90	110				
Lead	0.0595	0.0010	0.06		99	90	110				
Molybdenum	0.0614	0.0010	0.06		102	90	110				
Selenium	0.0605	0.0010	0.06		101	90	110				
Silver	0.0307	0.0010	0.03		102	90	110				
Uranium	0.0599	0.00030	0.06		100	90	110				
Vanadium	0.0594	0.0010	0.06		99	90	110				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140619B: 68** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/19/14 17:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0595	0.0010	0.06		99	90	110				
Arsenic	0.0601	0.0010	0.06		100	90	110				
Barium	0.0600	0.0010	0.06		100	90	110				
Cadmium	0.0321	0.0010	0.03		107	90	110				
Chromium	0.0604	0.0010	0.06		101	90	110				
Cobalt	0.0616	0.0010	0.06		103	90	110				
Copper	0.0614	0.0010	0.06		102	90	110				
Lead	0.0603	0.0010	0.06		100	90	110				
Molybdenum	0.0600	0.0010	0.06		100	90	110				
Selenium	0.0596	0.0010	0.06		99	90	110				
Silver	0.0302	0.0010	0.03		101	90	110				
Uranium	0.0603	0.00030	0.06		100	90	110				
Vanadium	0.0591	0.0010	0.06		99	90	110				

Associated samples: **H14060105-007A, H14060105-007B, H14060105-008A, H14060105-008B, H14060105-010A, H14060105-010B, H14060105-011A, H14060105-011B, H14060105-013A, H14060105-013B, H14060105-014A, H14060105-014B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98318

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/25/14 12:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.00	0.10	4		100	90	110				
Arsenic	0.828	0.0085	0.8		103	90	110				
Barium	0.791	0.10	0.8		99	90	110				
Beryllium	0.412	0.0010	0.4		103	90	110				
Boron	0.829	0.10	0.8		104	90	110				
Cobalt	0.821	0.010	0.8		103	90	110				
Copper	0.798	0.010	0.8		100	90	110				
Iron	3.89	0.020	4		97	90	110				
Lead	0.821	0.010	0.8		103	90	110				
Manganese	4.10	0.010	4		103	90	110				
Nickel	0.774	0.010	0.8		97	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140625A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/25/14 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	536	0.10	500		107	80	120				
Arsenic	0.00236	0.0085				0	0				
Barium	0.000790	0.10				0	0				
Beryllium	6.00E-05	0.0010				0	0				
Boron	0.00377	0.10				0	0				
Cobalt	-0.0110	0.010				0	0				
Copper	-0.000630	0.010				0	0				
Iron	188	0.020	200		94	80	120				
Lead	-0.0374	0.010				0	0				
Manganese	-0.00877	0.010				0	0				
Nickel	0.00737	0.010				0	0				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98318

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/25/14 12:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	512	0.10	500		102	80	120				
Arsenic	0.989	0.0085	1		99	80	120				
Barium	0.492	0.10	0.5		98	80	120				
Beryllium	0.499	0.0010	0.5		100	80	120				
Boron	0.980	0.10	1		98	80	120				
Cobalt	0.455	0.010	0.5		91	80	120				
Copper	0.498	0.010	0.5		100	80	120				
Iron	178	0.020	200		89	80	120				
Lead	0.930	0.010	1		93	80	120				
Manganese	0.482	0.010	0.5		96	80	120				
Nickel	0.873	0.010	1		87	80	120				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98360

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/25/14 10:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0614	0.0010	0.06		102	90	110				
Arsenic	0.0604	0.0010	0.06		101	90	110				
Cadmium	0.0315	0.0010	0.03		105	90	110				
Chromium	0.0610	0.0010	0.06		102	90	110				
Lead	0.0598	0.0010	0.06		100	90	110				
Molybdenum	0.0596	0.0010	0.06		99	90	110				
Selenium	0.0634	0.0010	0.06		106	90	110				
Silver	0.0302	0.0010	0.03		101	90	110				
Uranium	0.0594	0.00030	0.06		99	90	110				
Vanadium	0.0600	0.0010	0.06		100	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICPMS204-B_140625A: 53** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/25/14 14:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0605	0.0010	0.06		101	90	110				
Arsenic	0.0605	0.0010	0.06		101	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Chromium	0.0603	0.0010	0.06		101	90	110				
Lead	0.0595	0.0010	0.06		99	90	110				
Molybdenum	0.0601	0.0010	0.06		100	90	110				
Selenium	0.0585	0.0010	0.06		98	90	110				
Silver	0.0301	0.0010	0.03		100	90	110				
Uranium	0.0593	0.00030	0.06		99	90	110				
Vanadium	0.0594	0.0010	0.06		99	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-008A, H14060105-008B, H14060105-009A, H14060105-009B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98406

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140626B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/26/14 13:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.0615	0.0010	0.06		102	90	110				

Associated samples: **H14060105-006A, H14060105-006B, H14060105-009A, H14060105-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98453

Date: *08-Jul-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 2** SampType: **Sample Duplicate** Lab ID: **H14060105-006BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	53.6	0.20						55.02			

Associated samples: **H14060105-006B, H14060105-007B, H14060105-008B, H14060105-009B, H14060105-010B, H14060105-011B, H14060105-012B, H14060105-013B, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98498

Date: *08-Jul-14*

Run ID :Run Order: **ICPMS204-B_140701A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **07/01/14 10:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	0.0599	0.00030	0.06		100	90	110				

Associated samples: **H14060105-009A, H14060105-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98518

Date: *08-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **07/02/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.804	0.10	0.8		101	90	110				
Copper	0.806	0.010	0.8		101	90	110				
Iron	3.91	0.020	4		98	90	110				
Zinc	0.783	0.010	0.8		98	90	110				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140702A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **07/02/14 09:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.000500	0.10				0	0				
Copper	0.00196	0.010				0	0				
Iron	184	0.020	200		92	80	120				
Zinc	0.00491	0.010				0	0				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Run ID :Run Order: **ICP2-HE_140702A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **07/02/14 10:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.521	0.10	0.5		104	80	120				
Copper	0.534	0.010	0.5		107	80	120				
Iron	182	0.020	200		91	80	120				
Zinc	0.984	0.010	1		98	80	120				

Associated samples: **H14060105-008A, H14060105-008B, H14060105-011A, H14060105-011B, H14060105-012A, H14060105-012B, H14060105-014A, H14060105-014B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14060105
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140605A

Date: *08-Jul-14*

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 1** SampType: **Method Blank** Lab ID: **MB-1_140605A** Method: **A2540 D**

Analysis Date: **06/05/14 08:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_140605A** Method: **A2540 D**

Analysis Date: **06/05/14 08:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	92.0	10	100		**92**	80	120				

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 4** SampType: **Sample Duplicate** Lab ID: **H14060093-002B DUP** Method: **A2540 D**

Analysis Date: **06/05/14 08:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	86.0	10						74	**15**	5	R

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 1** SampType: **Sample Duplicate** Lab ID: **H14060094-001B DUP** Method: **A2540 D**

Analysis Date: **06/05/14 09:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	90.0	10						90	**0.0**	5	

Associated samples: **H14060105-001A, H14060105-002A, H14060105-003A, H14060105-004A, H14060105-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

Natural Resource Damage Program H14060105

Login completed by: Tracy L. Lorash
Date Received: 6/4/2014
Reviewed by: BL2000\sdull
Received by: TLL
Reviewed Date: 6/16/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☑	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Cooler 1 was received at 0.7°C, Cooler 2 at 15.8°C, Cooler 3 at 0.6°C. Samples in Coolers 1 and 3 were received on wet ice and temperature was taken from a temperature blank. Sediments in Cooler 2 were not received on ice and temperature was taken from a client sample.
Field Duplicate #2 (SS-01) nutrients sample was preserved to pH <2 with 2 mL of sulfuric acid per 250 mL in the laboratory upon receipt. TI 6/4/14

ANALYTICAL SUMMARY REPORT

July 14, 2014

MT DEQ-Federal Superfund
PO Box 200901
Helena, MT 59620-0901

Work Order: H14060106 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 64 samples for MT DEQ-Federal Superfund on 6/4/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14060106-001	SS-06G	06/03/14 15:30	06/04/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14060106-002	SS-07	06/03/14 14:30	06/04/14	Aqueous	Same As Above
H14060106-003	SS-08	06/03/14 13:15	06/04/14	Aqueous	Same As Above
H14060106-004	SS-10A	06/03/14 12:00	06/04/14	Aqueous	Same As Above
H14060106-005	SS-10B	06/03/14 11:00	06/04/14	Aqueous	Same As Above
H14060106-006	SS-11C	06/03/14 10:00	06/04/14	Aqueous	Same As Above
H14060106-007	SS-11D	06/03/14 9:15	06/04/14	Aqueous	Same As Above
H14060106-008	Field Blank #1	06/02/14 17:15	06/04/14	Aqueous	Same As Above
H14060106-009	SS-13	06/02/14 18:00	06/04/14	Aqueous	Same As Above
H14060106-010	Field Duplicate #1	06/02/14 18:00	06/04/14	Aqueous	Same As Above
H14060106-011	SS-14	06/02/14 15:45	06/04/14	Aqueous	Same As Above
H14060106-012	SS-15A	06/02/14 14:00	06/04/14	Aqueous	Same As Above
H14060106-013	SS-15B	06/02/14 12:30	06/04/14	Aqueous	Same As Above
H14060106-014	SS-16B	06/02/14 11:15	06/04/14	Aqueous	Same As Above
H14060106-015	SS-17D	06/02/14 10:30	06/04/14	Aqueous	Same As Above
H14060106-016	SS-19	06/02/14 9:00	06/04/14	Aqueous	Same As Above
H14060106-017	SS-06G Sediment Sieve <0.065mm	06/03/14 15:30	06/04/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves

ANALYTICAL SUMMARY REPORT

H14060106-018	SS-06G Sediment Sieve 0.065-1mm	06/03/14 15:30	06/04/14	Sediment	Same As Above
H14060106-019	SS-06G Sediment Sieve 1-2mm	06/03/14 15:30	06/04/14	Sediment	Same As Above
H14060106-020	SS-07 Sediment Sieve <0.065mm	06/03/14 14:30	06/04/14	Sediment	Same As Above
H14060106-021	SS-07 Sediment Sieve 0.065-1mm	06/03/14 14:30	06/04/14	Sediment	Same As Above
H14060106-022	SS-07 Sediment Sieve 1-2mm	06/03/14 14:30	06/04/14	Sediment	Same As Above
H14060106-023	SS-08 Sediment Sieve <0.065mm	06/03/14 13:15	06/04/14	Sediment	Same As Above
H14060106-024	SS-08 Sediment Sieve 0.065-1mm	06/03/14 13:15	06/04/14	Sediment	Same As Above
H14060106-025	SS-08 Sediment Sieve 1-2mm	06/03/14 13:15	06/04/14	Sediment	Same As Above
H14060106-026	SS-10A Sediment Sieve <0.065mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-027	SS-10A Sediment Sieve 0.065-1mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-028	SS-10A Sediment Sieve 1-2mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-029	SS-10B Sediment Sieve <0.065mm	06/03/14 11:00	06/04/14	Sediment	Same As Above
H14060106-030	SS-10B Sediment Sieve 0.065-1mm	06/03/14 11:00	06/04/14	Sediment	Same As Above
H14060106-031	SS-10B Sediment Sieve 1-2mm	06/03/14 11:00	06/04/14	Sediment	Same As Above
H14060106-032	SS-10A Duplicate #1 Sediment Sieve <0.065mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-033	SS-10A Duplicate #1 Sediment Sieve 0.065-1mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-034	SS-10A Duplicate #1 Sediment Sieve 1-2mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-035	SS-10A Duplicate #2 Sediment Sieve <0.065mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-036	SS-10A Duplicate #2 Sediment Sieve 0.065-1mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-037	SS-10A Duplicate #2 Sediment Sieve 1-2mm	06/03/14 12:00	06/04/14	Sediment	Same As Above
H14060106-038	SS-11C Sediment Sieve <0.065mm	06/03/14 10:00	06/04/14	Sediment	Same As Above
H14060106-039	SS-11C Sediment Sieve 0.065-1mm	06/03/14 10:00	06/04/14	Sediment	Same As Above
H14060106-040	SS-11C Sediment Sieve 1-2mm	06/03/14 10:00	06/04/14	Sediment	Same As Above
H14060106-041	SS-11D Sediment Sieve <0.065mm	06/03/14 9:15	06/04/14	Sediment	Same As Above
H14060106-042	SS-11D Sediment Sieve 0.065-1mm	06/03/14 9:15	06/04/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14060106-043	SS-11D Sediment Sieve 1-2mm	06/03/14 9:15	06/04/14	Sediment	Same As Above
H14060106-044	SS-13 Sediment Sieve <0.065mm	06/02/14 18:00	06/04/14	Sediment	Same As Above
H14060106-045	SS-13 Sediment Sieve 0.065-1mm	06/02/14 18:00	06/04/14	Sediment	Same As Above
H14060106-046	SS-13 Sediment Sieve 1-2mm	06/02/14 18:00	06/04/14	Sediment	Same As Above
H14060106-047	SS-14 Sediment Sieve <0.065mm	06/02/14 15:45	06/04/14	Sediment	Same As Above
H14060106-048	SS-14 Sediment Sieve 0.065-1mm	06/02/14 15:45	06/04/14	Sediment	Same As Above
H14060106-049	SS-14 Sediment Sieve 1-2mm	06/02/14 15:45	06/04/14	Sediment	Same As Above
H14060106-050	SS-15A Sediment Sieve <0.065mm	06/02/14 14:00	06/04/14	Sediment	Same As Above
H14060106-051	SS-15A Sediment Sieve 0.065-1mm	06/02/14 14:00	06/04/14	Sediment	Same As Above
H14060106-052	SS-15A Sediment Sieve 1-2mm	06/02/14 14:00	06/04/14	Sediment	Same As Above
H14060106-053	SS-15B Sediment Sieve <0.065mm	06/02/14 12:30	06/04/14	Sediment	Same As Above
H14060106-054	SS-15B Sediment Sieve 0.065-1mm	06/02/14 12:30	06/04/14	Sediment	Same As Above
H14060106-055	SS-15B Sediment Sieve 1-2mm	06/02/14 12:30	06/04/14	Sediment	Same As Above
H14060106-056	SS-16B Sediment Sieve <0.065mm	06/02/14 11:15	06/04/14	Sediment	Same As Above
H14060106-057	SS-16B Sediment Sieve 0.065-1mm	06/02/14 11:15	06/04/14	Sediment	Same As Above
H14060106-058	SS-16B Sediment Sieve 1-2mm	06/02/14 11:15	06/04/14	Sediment	Same As Above
H14060106-059	SS-17D Sediment Sieve <0.065mm	06/02/14 10:30	06/04/14	Sediment	Same As Above
H14060106-060	SS-17D Sediment Sieve 0.065-1mm	06/02/14 10:30	06/04/14	Sediment	Same As Above
H14060106-061	SS-17D Sediment Sieve 1-2mm	06/02/14 10:30	06/04/14	Sediment	Same As Above
H14060106-062	SS-19 Sediment Sieve <0.065mm	06/02/14 9:00	06/04/14	Sediment	Same As Above
H14060106-063	SS-19 Sediment Sieve 0.065-1mm	06/02/14 9:00	06/04/14	Sediment	Same As Above
H14060106-064	SS-19 Sediment Sieve 1-2mm	06/02/14 9:00	06/04/14	Sediment	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

ANALYTICAL SUMMARY REPORT

Report Approved By:

CLIENT: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Work Order: H14060106

Report Date: 07/14/14

CASE NARRATIVE

For this workorder, there were several samples, where at least one Dissolved metal was higher than the corresponding Total / Total Recoverable metal. These results were all confirmed by re-analysis. Abb 7/7/14

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14060106-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	21	mg/L		1		A2540 D	06/05/14 09:01 / blm		I24 (14410200)_140605A	11	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	73	mg/L		4		A2320 B	06/05/14 14:05 / SR		PHSC_101-H_140605A	98	R97712
Bicarbonate as HCO3	81	mg/L		4		A2320 B	06/05/14 14:05 / SR		PHSC_101-H_140605A	98	R97712
Chloride	12	mg/L		1		E300.0	06/05/14 17:10 / SR		IC102-H_140605A	26	R97753
Sulfate	42	mg/L		1		E300.0	06/05/14 17:10 / SR		IC102-H_140605A	26	R97753
Hardness as CaCO3	105	mg/L		1		A2340 B	06/05/14 15:59 / abb		CALC_140606A	729	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:14 / cm		FIA203-HE_140606E	30	R97804
Nitrogen, Nitrate+Nitrite as N	0.24	mg/L		0.05		E353.2	06/05/14 12:59 / cm		FIA203-HE_140605B	56	R97740
Nitrogen, Total	0.85	mg/L		0.05		A4500 N-C	06/09/14 13:07 / cm	06/09/14 09:37	FIA203-HE_140609B	29	24860
Phosphorus, Total as P	0.106	mg/L		0.005		E365.1	06/06/14 11:03 / cm	06/06/14 09:54	FIA202-HE_140606A	24	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Barium	0.030	mg/L		0.003		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 15:59 / sld		ICP2-HE_140605C	41	R97754
Cadmium	0.00004	mg/L		0.00003		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Copper	0.007	mg/L		0.001		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Iron	0.22	mg/L		0.02		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Manganese	0.043	mg/L		0.001		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 13:04 / sbk	06/09/14 08:04	HGCV202-H_140610A	24	24850
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14060106-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	3	mg/L		1		E200.7	06/05/14 15:59 / sld		ICP2-HE_140605C	41	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Sodium	12	mg/L		1		E200.7	06/05/14 15:59 / sld		ICP2-HE_140605C	41	R97754
Uranium	0.0024	mg/L		0.0002		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
Zinc	ND	mg/L		0.008		E200.8	06/11/14 19:17 / dck		ICPMS204-B_140611B	30	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.364	mg/L		0.009		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Arsenic	0.011	mg/L		0.001		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Barium	0.032	mg/L		0.003		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Cadmium	0.00017	mg/L		0.00003		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Calcium	31	mg/L		1		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Copper	0.025	mg/L		0.001		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Iron	1.02	mg/L		0.02		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Lead	0.0058	mg/L		0.0003		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Manganese	0.096	mg/L		0.001		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Mercury	0.000027	mg/L		5E-06		E245.1	06/10/14 13:09 / sbk	06/09/14 08:04	HGCV202-H_140610A	25	24850
Molybdenum	0.006	mg/L		0.005		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Potassium	3	mg/L		1		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Sodium	13	mg/L		1		E200.7	06/09/14 11:44 / sld	06/05/14 09:20	ICP2-HE_140609A	24	24814
Uranium	0.0026	mg/L		0.0002		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14060106-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814
Zinc	0.035	mg/L		0.008		E200.8	06/11/14 19:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	39	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14060106-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	16	mg/L		1		A2540 D	06/05/14 09:01 / blm		I24 (14410200)_140605A	13	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	85	mg/L		4		A2320 B	06/05/14 14:10 / SR		PHSC_101-H_140605A	100	R97712
Bicarbonate as HCO3	100	mg/L		4		A2320 B	06/05/14 14:10 / SR		PHSC_101-H_140605A	100	R97712
Chloride	15	mg/L		1		E300.0	06/05/14 17:21 / SR		IC102-H_140605A	27	R97753
Sulfate	42	mg/L		1		E300.0	06/05/14 17:21 / SR		IC102-H_140605A	27	R97753
Hardness as CaCO3	117	mg/L		1		A2340 B	06/05/14 16:37 / abb		CALC_140606A	740	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	3.0	mg/L	D	0.1		E350.1	06/06/14 15:48 / cm		FIA203-HE_140606E	58	R97804
Nitrogen, Nitrate+Nitrite as N	0.29	mg/L		0.05		E353.2	06/05/14 13:03 / cm		FIA203-HE_140605B	59	R97740
Nitrogen, Total	4.3	mg/L	D	0.2		A4500 N-C	06/09/14 13:21 / cm	06/09/14 09:37	FIA203-HE_140609B	41	24860
Phosphorus, Total as P	0.435	mg/L		0.005		E365.1	06/06/14 11:21 / cm	06/06/14 09:54	FIA202-HE_140606A	42	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Barium	0.030	mg/L		0.003		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 16:37 / sld		ICP2-HE_140605C	51	R97754
Cadmium	0.00004	mg/L		0.00003		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Copper	0.008	mg/L		0.001		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Iron	0.20	mg/L		0.02		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Manganese	0.045	mg/L		0.001		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 13:13 / sbk	06/09/14 08:04	HGCV202-H_140610A	26	24850
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14060106-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 16:37 / sld		ICP2-HE_140605C	51	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Sodium	15	mg/L		1		E200.7	06/05/14 16:37 / sld		ICP2-HE_140605C	51	R97754
Uranium	0.0025	mg/L		0.0002		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
Zinc	0.017	mg/L		0.008		E200.8	06/11/14 20:27 / dck		ICPMS204-B_140611B	46	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.233	mg/L		0.009		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Barium	0.030	mg/L		0.003		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Cadmium	0.00012	mg/L		0.00003		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Calcium	31	mg/L		1		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Copper	0.021	mg/L		0.001		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Iron	0.77	mg/L		0.02		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Lead	0.0037	mg/L		0.0003		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Manganese	0.083	mg/L		0.001		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Mercury	0.000022	mg/L		5E-06		E245.1	06/10/14 13:26 / sbk	06/09/14 08:04	HGCV202-H_140610A	29	24850
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Potassium	4	mg/L		1		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Sodium	15	mg/L		1		E200.7	06/09/14 11:59 / sld	06/05/14 09:20	ICP2-HE_140609A	28	24814
Uranium	0.0027	mg/L		0.0002		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14060106-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814
Zinc	0.032	mg/L		0.008		E200.8	06/11/14 20:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	47	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14060106-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	18	mg/L		1		A2540 D	06/05/14 09:03 / blm		I24 (14410200)_140605A	16	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	83	mg/L		4		A2320 B	06/05/14 14:15 / SR		PHSC_101-H_140605A	102	R97712
Bicarbonate as HCO3	100	mg/L		4		A2320 B	06/05/14 14:15 / SR		PHSC_101-H_140605A	102	R97712
Chloride	16	mg/L		1		E300.0	06/05/14 17:32 / SR		IC102-H_140605A	28	R97753
Sulfate	46	mg/L		1		E300.0	06/05/14 17:32 / SR		IC102-H_140605A	28	R97753
Hardness as CaCO3	122	mg/L		1		A2340 B	06/05/14 16:40 / abb		CALC_140611A	69	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	2.6	mg/L	D	0.1		E350.1	06/06/14 15:49 / cm		FIA203-HE_140606E	59	R97804
Nitrogen, Nitrate+Nitrite as N	1.10	mg/L		0.05		E353.2	06/05/14 13:04 / cm		FIA203-HE_140605B	60	R97740
Nitrogen, Total	5.1	mg/L	D	0.2		A4500 N-C	06/09/14 13:23 / cm	06/09/14 09:37	FIA203-HE_140609B	42	24860
Phosphorus, Total as P	0.485	mg/L		0.005		E365.1	06/06/14 11:38 / cm	06/06/14 09:54	FIA202-HE_140606A	58	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Barium	0.036	mg/L		0.003		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 16:40 / sld		ICP2-HE_140605C	52	R97754
Cadmium	0.00006	mg/L		0.00003		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Copper	0.010	mg/L		0.001		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Iron	0.19	mg/L		0.02		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Manganese	0.110	mg/L		0.001		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 13:30 / sbk	06/09/14 08:04	HGCV202-H_140610A	30	24850
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14060106-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 16:40 / sld		ICP2-HE_140605C	52	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Sodium	17	mg/L		1		E200.7	06/05/14 16:40 / sld		ICP2-HE_140605C	52	R97754
Uranium	0.0026	mg/L		0.0002		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
Zinc	0.030	mg/L		0.008		E200.8	06/11/14 20:36 / dck		ICPMS204-B_140611B	48	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.319	mg/L		0.009		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Antimony	0.0005	mg/L		0.0005		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Arsenic	0.010	mg/L		0.001		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Barium	0.035	mg/L		0.003		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Cadmium	0.00023	mg/L		0.00003		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Calcium	31	mg/L		1		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Copper	0.029	mg/L		0.001		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Iron	0.89	mg/L		0.02		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Lead	0.0059	mg/L		0.0003		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Manganese	0.165	mg/L		0.001		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Mercury	0.000029	mg/L		5E-06		E245.1	06/10/14 13:34 / sbk	06/09/14 08:04	HGCV202-H_140610A	31	24850
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Potassium	4	mg/L		1		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Sodium	17	mg/L		1		E200.7	06/09/14 12:03 / sld	06/05/14 09:20	ICP2-HE_140609A	29	24814
Uranium	0.0029	mg/L		0.0002		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14060106-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814
Zinc	0.059	mg/L		0.008		E200.8	06/11/14 20:40 / dck	06/05/14 09:20	ICPMS204-B_140611B	49	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14060106-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	9	mg/L		1		A2540 D	06/05/14 09:04 / blm		I24 (14410200)_140605A	18	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	77	mg/L		4		A2320 B	06/05/14 14:20 / SR		PHSC_101-H_140605A	104	R97712
Bicarbonate as HCO3	94	mg/L		4		A2320 B	06/05/14 14:20 / SR		PHSC_101-H_140605A	104	R97712
Chloride	16	mg/L		1		E300.0	06/05/14 17:43 / SR		IC102-H_140605A	29	R97753
Sulfate	50	mg/L		1		E300.0	06/05/14 17:43 / SR		IC102-H_140605A	29	R97753
Hardness as CaCO3	122	mg/L		1		A2340 B	06/05/14 16:55 / abb		CALC_140606A	751	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	0.69	mg/L		0.05		E350.1	06/06/14 15:18 / cm		FIA203-HE_140606E	33	R97804
Nitrogen, Nitrate+Nitrite as N	1.54	mg/L		0.05		E353.2	06/05/14 13:05 / cm		FIA203-HE_140605B	61	R97740
Nitrogen, Total	3.23	mg/L	D	0.06		A4500 N-C	06/09/14 13:24 / cm	06/09/14 09:37	FIA203-HE_140609B	43	24860
Phosphorus, Total as P	0.375	mg/L		0.005		E365.1	06/06/14 11:13 / cm	06/06/14 09:54	FIA202-HE_140606A	34	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Arsenic	0.007	mg/L		0.001		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Barium	0.034	mg/L		0.003		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 16:55 / sld		ICP2-HE_140605C	56	R97754
Cadmium	0.00006	mg/L		0.00003		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Copper	0.012	mg/L		0.001		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Iron	0.19	mg/L		0.02		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Manganese	0.139	mg/L		0.001		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 13:55 / sbk	06/09/14 08:04	HGCV202-H_140610A	36	24851
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14060106-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 16:55 / sld		ICP2-HE_140605C	56	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Sodium	17	mg/L		1		E200.7	06/05/14 16:55 / sld		ICP2-HE_140605C	56	R97754
Uranium	0.0027	mg/L		0.0002		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
Zinc	0.027	mg/L		0.008		E200.8	06/11/14 20:44 / dck		ICPMS204-B_140611B	50	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.210	mg/L		0.009		E200.7	06/09/14 12:06 / sld	06/05/14 09:20	ICP2-HE_140609A	30	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Barium	0.033	mg/L		0.003		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:06 / sld	06/05/14 09:20	ICP2-HE_140609A	30	24814
Cadmium	0.00023	mg/L		0.00003		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Calcium	34	mg/L		1		E200.7	06/09/14 12:06 / sld	06/05/14 09:20	ICP2-HE_140609A	30	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Copper	0.026	mg/L		0.001		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Iron	0.74	mg/L		0.02		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Lead	0.0038	mg/L		0.0003		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 12:06 / sld	06/05/14 09:20	ICP2-HE_140609A	30	24814
Manganese	0.183	mg/L		0.001		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Mercury	0.000016	mg/L		5E-06		E245.1	06/10/14 13:59 / sbk	06/09/14 08:04	HGCV202-H_140610A	37	24851
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Potassium	4	mg/L		1		E200.7	06/09/14 12:06 / sld	06/05/14 09:20	ICP2-HE_140609A	30	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Sodium	18	mg/L		1		E200.7	06/09/14 12:06 / sld	06/05/14 09:20	ICP2-HE_140609A	30	24814
Uranium	0.0030	mg/L		0.0002		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14060106-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814
Zinc	0.052	mg/L		0.008		E200.8	06/11/14 20:49 / dck	06/05/14 09:20	ICPMS204-B_140611B	51	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14060106-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	10	mg/L		1		A2540 D	06/05/14 09:04 / blm		I24 (14410200)_140605A	17	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	77	mg/L		4		A2320 B	06/05/14 14:25 / SR		PHSC_101-H_140605A	106	R97712
Bicarbonate as HCO3	93	mg/L		4		A2320 B	06/05/14 14:25 / SR		PHSC_101-H_140605A	106	R97712
Chloride	16	mg/L		1		E300.0	06/05/14 18:16 / SR		IC102-H_140605A	32	R97753
Sulfate	50	mg/L		1		E300.0	06/06/14 16:25 / SR		IC102-H_140606A	18	R97833
Hardness as CaCO3	125	mg/L		1		A2340 B	06/05/14 16:59 / abb		CALC_140611A	80	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	0.54	mg/L		0.05		E350.1	06/06/14 15:19 / cm		FIA203-HE_140606E	34	R97804
Nitrogen, Nitrate+Nitrite as N	1.46	mg/L		0.05		E353.2	06/05/14 13:07 / cm		FIA203-HE_140605B	62	R97740
Nitrogen, Total	2.96	mg/L	D	0.06		A4500 N-C	06/09/14 13:25 / cm	06/09/14 09:37	FIA203-HE_140609B	44	24860
Phosphorus, Total as P	0.368	mg/L		0.005		E365.1	06/06/14 11:14 / cm	06/06/14 09:54	FIA202-HE_140606A	35	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Arsenic	0.007	mg/L		0.001		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Barium	0.037	mg/L		0.003		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 16:59 / sld		ICP2-HE_140605C	57	R97754
Cadmium	0.00006	mg/L		0.00003		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Copper	0.011	mg/L		0.001		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Iron	0.19	mg/L		0.02		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Manganese	0.146	mg/L		0.001		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 14:04 / sbk	06/09/14 08:04	HGCV202-H_140610A	38	24851
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14060106-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 11:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 16:59 / sld		ICP2-HE_140605C	57	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Sodium	17	mg/L		1		E200.7	06/05/14 16:59 / sld		ICP2-HE_140605C	57	R97754
Uranium	0.0028	mg/L		0.0002		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
Zinc	0.027	mg/L		0.008		E200.8	06/11/14 20:53 / dck		ICPMS204-B_140611B	52	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.183	mg/L		0.009		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Barium	0.033	mg/L		0.003		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Cadmium	0.00024	mg/L		0.00003		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Calcium	33	mg/L		1		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Copper	0.026	mg/L		0.001		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Iron	0.72	mg/L		0.02		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Lead	0.0041	mg/L		0.0003		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Manganese	0.189	mg/L		0.001		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Mercury	0.000021	mg/L		5E-06		E245.1	06/10/14 14:08 / sbk	06/09/14 08:04	HGCV202-H_140610A	39	24851
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Potassium	4	mg/L		1		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Sodium	17	mg/L		1		E200.7	06/09/14 12:17 / sld	06/05/14 09:20	ICP2-HE_140609A	33	24814
Uranium	0.0030	mg/L		0.0002		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14060106-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814
Zinc	0.052	mg/L		0.008		E200.8	06/11/14 20:57 / dck	06/05/14 09:20	ICPMS204-B_140611B	53	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14060106-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 10:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	11	mg/L		1		A2540 D	06/05/14 09:04 / blm		I24 (14410200)_140605A	19	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	81	mg/L		4		A2320 B	06/05/14 14:30 / SR		PHSC_101-H_140605A	108	R97712
Bicarbonate as HCO3	98	mg/L		4		A2320 B	06/05/14 14:30 / SR		PHSC_101-H_140605A	108	R97712
Chloride	26	mg/L		1		E300.0	06/05/14 18:50 / SR		IC102-H_140605A	35	R97753
Sulfate	62	mg/L		1		E300.0	06/05/14 18:50 / SR		IC102-H_140605A	35	R97753
Hardness as CaCO3	143	mg/L		1		A2340 B	06/05/14 17:02 / abb		CALC_140606A	762	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	0.63	mg/L		0.05		E350.1	06/06/14 15:20 / cm		FIA203-HE_140606E	35	R97804
Nitrogen, Nitrate+Nitrite as N	1.47	mg/L		0.05		E353.2	06/05/14 13:08 / cm		FIA203-HE_140605B	63	R97740
Nitrogen, Total	2.5	mg/L	D	0.2		A4500 N-C	06/11/14 16:13 / cm	06/11/14 12:51	FIA203-HE_140612A	15	24900
Phosphorus, Total as P	0.377	mg/L		0.005		E365.1	06/06/14 11:15 / cm	06/06/14 09:54	FIA202-HE_140606A	36	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Barium	0.038	mg/L		0.003		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:02 / sld		ICP2-HE_140605C	58	R97754
Cadmium	0.00010	mg/L		0.00003		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Copper	0.012	mg/L		0.001		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Iron	0.16	mg/L		0.02		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Manganese	0.204	mg/L		0.001		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 14:12 / sbk	06/09/14 08:04	HGCV202-H_140610A	40	24851
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14060106-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 10:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 17:02 / sld		ICP2-HE_140605C	58	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Sodium	21	mg/L		1		E200.7	06/05/14 17:02 / sld		ICP2-HE_140605C	58	R97754
Uranium	0.0031	mg/L		0.0002		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
Zinc	0.051	mg/L		0.008		E200.8	06/11/14 21:02 / dck		ICPMS204-B_140611B	54	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.137	mg/L		0.009		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Barium	0.036	mg/L		0.003		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Cadmium	0.00028	mg/L		0.00003		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Calcium	39	mg/L		1		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Copper	0.024	mg/L		0.001		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Iron	0.56	mg/L		0.02		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Lead	0.0029	mg/L		0.0003		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Magnesium	9	mg/L		1		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Manganese	0.254	mg/L		0.001		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Mercury	0.000018	mg/L		5E-06		E245.1	06/10/14 14:25 / sbk	06/09/14 08:04	HGCV202-H_140610A	43	24851
Molybdenum	0.005	mg/L		0.005		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Potassium	5	mg/L		1		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Sodium	22	mg/L		1		E200.7	06/09/14 12:21 / sld	06/05/14 09:20	ICP2-HE_140609A	34	24814
Uranium	0.0033	mg/L		0.0002		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14060106-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 10:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814
Zinc	0.078	mg/L		0.008		E200.8	06/11/14 21:06 / dck	06/05/14 09:20	ICPMS204-B_140611B	55	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14060106-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	12	mg/L		1		A2540 D	06/05/14 09:05 / blm		I24 (14410200)_140605A	20	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	92	mg/L		4		A2320 B	06/05/14 14:35 / SR		PHSC_101-H_140605A	110	R97712
Bicarbonate as HCO3	110	mg/L		4		A2320 B	06/05/14 14:35 / SR		PHSC_101-H_140605A	110	R97712
Chloride	20	mg/L		1		E300.0	06/05/14 19:01 / SR		IC102-H_140605A	36	R97753
Sulfate	52	mg/L		1		E300.0	06/05/14 19:01 / SR		IC102-H_140605A	36	R97753
Hardness as CaCO3	135	mg/L		1		A2340 B	06/05/14 17:06 / abb		CALC_140611A	91	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	0.56	mg/L		0.05		E350.1	06/06/14 15:21 / cm		FIA203-HE_140606E	36	R97804
Nitrogen, Nitrate+Nitrite as N	1.09	mg/L		0.05		E353.2	06/05/14 13:09 / cm		FIA203-HE_140605B	64	R97740
Nitrogen, Total	2.41	mg/L	D	0.06		A4500 N-C	06/11/14 16:16 / cm	06/11/14 12:51	FIA203-HE_140612A	18	24900
Phosphorus, Total as P	0.360	mg/L		0.005		E365.1	06/06/14 11:16 / cm	06/06/14 09:54	FIA202-HE_140606A	37	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Arsenic	0.013	mg/L		0.001		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Barium	0.037	mg/L		0.003		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:06 / sld		ICP2-HE_140605C	59	R97754
Cadmium	0.00008	mg/L		0.00003		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Copper	0.010	mg/L		0.001		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Iron	0.15	mg/L		0.02		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Manganese	0.179	mg/L		0.001		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Mercury	5.2E-06	mg/L		5E-06		E245.1	06/10/14 14:29 / sbk	06/09/14 08:04	HGCV202-H_140610A	44	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14060106-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 17:06 / sld		ICP2-HE_140605C	59	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Sodium	22	mg/L		1		E200.7	06/05/14 17:06 / sld		ICP2-HE_140605C	59	R97754
Uranium	0.0027	mg/L		0.0002		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
Zinc	0.045	mg/L		0.008		E200.8	06/11/14 21:24 / dck		ICPMS204-B_140611B	59	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.190	mg/L		0.009		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Arsenic	0.014	mg/L		0.001		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Barium	0.035	mg/L		0.003		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Cadmium	0.00025	mg/L		0.00003		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Calcium	36	mg/L		1		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Copper	0.020	mg/L		0.001		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Iron	0.51	mg/L		0.02		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Lead	0.0027	mg/L		0.0003		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Manganese	0.222	mg/L		0.001		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Mercury	0.000018	mg/L		5E-06		E245.1	06/10/14 14:33 / sbk	06/09/14 08:04	HGCV202-H_140610A	45	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Potassium	4	mg/L		1		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814
Sodium	23	mg/L		1		E200.7	06/09/14 12:25 / sld	06/05/14 09:20	ICP2-HE_140609A	35	24814
Uranium	0.0028	mg/L		0.0002		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	60	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14060106-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	: 60	24814
Zinc	0.066	mg/L		0.008		E200.8	06/11/14 21:28 / dck	06/05/14 09:20	ICPMS204-B_140611B	: 60	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14060106-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 17:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	06/05/14 09:05 / blm		I24 (14410200)_140605A	21	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	06/05/14 14:45 / SR		PHSC_101-H_140605A	114	R97712
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	06/05/14 14:45 / SR		PHSC_101-H_140605A	114	R97712
Chloride	ND	mg/L		1		E300.0	06/05/14 19:12 / SR		IC102-H_140605A	37	R97753
Sulfate	ND	mg/L		1		E300.0	06/05/14 19:12 / SR		IC102-H_140605A	37	R97753
Hardness as CaCO3	ND	mg/L		1		A2340 B	06/05/14 17:10 / abb		CALC_140606A	773	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:25 / cm		FIA203-HE_140606E	39	R97804
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	06/05/14 13:10 / cm		FIA203-HE_140605B	65	R97740
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	06/11/14 16:18 / cm	06/11/14 12:58	FIA203-HE_140612A	19	24900
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	06/06/14 11:17 / cm	06/06/14 09:54	FIA202-HE_140606A	38	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Arsenic	ND	mg/L		0.001		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Barium	0.006	mg/L		0.003		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:10 / sld		ICP2-HE_140605C	60	R97754
Cadmium	ND	mg/L		0.00003		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Copper	ND	mg/L		0.001		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Iron	ND	mg/L		0.02		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Lead	ND	mg/L		0.0003		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Manganese	ND	mg/L		0.001		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 14:37 / sbk	06/09/14 08:04	HGCV202-H_140610A	46	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14060106-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 17:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	ND	mg/L		1		E200.7	06/05/14 17:10 / sld		ICP2-HE_140605C	60	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Sodium	ND	mg/L		1		E200.7	06/05/14 17:10 / sld		ICP2-HE_140605C	60	R97754
Uranium	ND	mg/L		0.0002		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
Zinc	0.012	mg/L		0.008		E200.8	06/11/14 21:32 / dck		ICPMS204-B_140611B	61	R98002
-Barium and Zinc were confirmed by duplicate analysis.											
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Arsenic	ND	mg/L		0.001		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Barium	ND	mg/L		0.003		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Cadmium	ND	mg/L		0.00003		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Calcium	ND	mg/L		1		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Copper	ND	mg/L		0.001		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Iron	ND	mg/L		0.02		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Lead	ND	mg/L		0.0003		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Magnesium	ND	mg/L		1		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Manganese	ND	mg/L		0.001		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Mercury	ND	mg/L		5E-06		E245.1	06/10/14 14:42 / sbk	06/09/14 08:04	HGCV202-H_140610A	47	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Potassium	ND	mg/L		1		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Sodium	ND	mg/L		1		E200.7	06/09/14 12:29 / sld	06/05/14 09:20	ICP2-HE_140609A	36	24814
Uranium	ND	mg/L		0.0002		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14060106-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 17:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814
Zinc	ND	mg/L		0.008		E200.8	06/11/14 21:37 / dck	06/05/14 09:20	ICPMS204-B_140611B	62	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14060106-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	14	mg/L		1		A2540 D	06/05/14 09:06 / blm		I24 (14410200)_140605A	22	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	91	mg/L		4		A2320 B	06/05/14 15:10 / SR		PHSC_101-H_140605A	119	R97712
Bicarbonate as HCO3	110	mg/L		4		A2320 B	06/05/14 15:10 / SR		PHSC_101-H_140605A	119	R97712
Chloride	20	mg/L		1		E300.0	06/05/14 19:23 / SR		IC102-H_140605A	38	R97753
Sulfate	52	mg/L		1		E300.0	06/05/14 19:23 / SR		IC102-H_140605A	38	R97753
Hardness as CaCO3	133	mg/L		1		A2340 B	06/05/14 17:21 / abb		CALC_140611A	102	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	0.12	mg/L		0.05		E350.1	06/06/14 15:29 / cm		FIA203-HE_140606E	42	R97804
Nitrogen, Nitrate+Nitrite as N	1.37	mg/L		0.05		E353.2	06/05/14 13:11 / cm		FIA203-HE_140605B	66	R97740
Nitrogen, Total	1.12	mg/L		0.05		A4500 N-C	06/11/14 16:19 / cm	06/11/14 12:58	FIA203-HE_140612A	20	24900
Phosphorus, Total as P	0.329	mg/L		0.005		E365.1	06/06/14 11:18 / cm	06/06/14 09:54	FIA202-HE_140606A	39	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Arsenic	0.013	mg/L		0.001		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Barium	0.036	mg/L		0.003		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:21 / sld		ICP2-HE_140605C	63	R97754
Cadmium	0.00008	mg/L		0.00003		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Copper	0.012	mg/L		0.001		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Iron	0.13	mg/L		0.02		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Manganese	0.130	mg/L		0.001		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Mercury	6.3E-06	mg/L		5E-06		E245.1	06/10/14 14:54 / sbk	06/09/14 08:04	HGCV202-H_140610A	50	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14060106-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	5	mg/L		1		E200.7	06/05/14 17:21 / sld		ICP2-HE_140605C	63	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Sodium	24	mg/L		1		E200.7	06/05/14 17:21 / sld		ICP2-HE_140605C	63	R97754
Uranium	0.0027	mg/L		0.0002		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
Zinc	0.022	mg/L		0.008		E200.8	06/11/14 21:41 / dck		ICPMS204-B_140611B	63	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.270	mg/L		0.009		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Arsenic	0.014	mg/L		0.001		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Barium	0.034	mg/L		0.003		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Cadmium	0.00022	mg/L		0.00003		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Calcium	36	mg/L		1		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Copper	0.020	mg/L		0.001		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Iron	0.56	mg/L		0.02		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Lead	0.0031	mg/L		0.0003		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Manganese	0.182	mg/L		0.001		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Mercury	0.000017	mg/L		5E-06		E245.1	06/10/14 14:58 / sbk	06/09/14 08:04	HGCV202-H_140610A	51	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Potassium	5	mg/L		1		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Sodium	24	mg/L		1		E200.7	06/09/14 12:33 / sld	06/05/14 09:20	ICP2-HE_140609A	37	24814
Uranium	0.0029	mg/L		0.0002		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14060106-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814
Zinc	0.051	mg/L		0.008		E200.8	06/11/14 21:46 / dck	06/05/14 09:20	ICPMS204-B_140611B	64	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #1
Lab ID: H14060106-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	15	mg/L		1		A2540 D	06/05/14 09:06 / blm		I24 (14410200)_140605A	23	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	90	mg/L		4		A2320 B	06/05/14 15:20 / SR		PHSC_101-H_140605A	123	R97712
Bicarbonate as HCO3	110	mg/L		4		A2320 B	06/05/14 15:20 / SR		PHSC_101-H_140605A	123	R97712
Chloride	20	mg/L		1		E300.0	06/05/14 19:34 / SR		IC102-H_140605A	39	R97753
Sulfate	53	mg/L		1		E300.0	06/05/14 19:34 / SR		IC102-H_140605A	39	R97753
Hardness as CaCO3	132	mg/L		1		A2340 B	06/05/14 17:25 / abb		CALC_140606A	784	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	0.11	mg/L		0.05		E350.1	06/06/14 15:30 / cm		FIA203-HE_140606E	43	R97804
Nitrogen, Nitrate+Nitrite as N	1.37	mg/L		0.05		E353.2	06/05/14 13:13 / cm		FIA203-HE_140605B	67	R97740
Nitrogen, Total	1.14	mg/L		0.05		A4500 N-C	06/11/14 16:20 / cm	06/11/14 12:58	FIA203-HE_140612A	21	24900
Phosphorus, Total as P	0.324	mg/L		0.005		E365.1	06/06/14 11:19 / cm	06/06/14 09:54	FIA202-HE_140606A	40	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Arsenic	0.013	mg/L		0.001		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Barium	0.035	mg/L		0.003		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:25 / sld		ICP2-HE_140605C	64	R97754
Cadmium	0.00008	mg/L		0.00003		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Copper	0.012	mg/L		0.001		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Iron	0.13	mg/L		0.02		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Manganese	0.132	mg/L		0.001		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Mercury	5.5E-06	mg/L		5E-06		E245.1	06/10/14 15:03 / sbk	06/09/14 08:04	HGCV202-H_140610A	52	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #1
Lab ID: H14060106-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	5	mg/L		1		E200.7	06/05/14 17:25 / sld		ICP2-HE_140605C	64	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Sodium	24	mg/L		1		E200.7	06/05/14 17:25 / sld		ICP2-HE_140605C	64	R97754
Uranium	0.0027	mg/L		0.0002		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
Zinc	0.022	mg/L		0.008		E200.8	06/11/14 21:50 / dck		ICPMS204-B_140611B	65	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.183	mg/L		0.009		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Arsenic	0.013	mg/L		0.001		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Barium	0.030	mg/L		0.003		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Cadmium	0.00022	mg/L		0.00003		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Calcium	29	mg/L		1		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Copper	0.018	mg/L		0.001		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Iron	0.44	mg/L		0.02		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Lead	0.0028	mg/L		0.0003		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Magnesium	7	mg/L		1		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Manganese	0.168	mg/L		0.001		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Mercury	0.000018	mg/L		5E-06		E245.1	06/10/14 15:07 / sbk	06/09/14 08:04	HGCV202-H_140610A	53	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Potassium	4	mg/L		1		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Sodium	20	mg/L		1		E200.7	06/09/14 12:36 / sld	06/05/14 09:20	ICP2-HE_140609A	38	24814
Uranium	0.0026	mg/L		0.0002		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Duplicate #1
Lab ID: H14060106-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814
Zinc	0.056	mg/L		0.008		E200.8	06/11/14 21:55 / dck	06/05/14 09:20	ICPMS204-B_140611B	66	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14060106-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	24	mg/L		1		A2540 D	06/05/14 09:06 / blm		I24 (14410200)_140605A	24	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	91	mg/L		4		A2320 B	06/05/14 15:40 / SR		PHSC_101-H_140605A	126	R97712
Bicarbonate as HCO3	100	mg/L		4		A2320 B	06/05/14 15:40 / SR		PHSC_101-H_140605A	126	R97712
Chloride	20	mg/L		1		E300.0	06/05/14 19:45 / SR		IC102-H_140605A	40	R97753
Sulfate	54	mg/L		1		E300.0	06/05/14 19:45 / SR		IC102-H_140605A	40	R97753
Hardness as CaCO3	133	mg/L		1		A2340 B	06/05/14 17:29 / abb		CALC_140611A	113	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:31 / cm		FIA203-HE_140606E	44	R97804
Nitrogen, Nitrate+Nitrite as N	1.02	mg/L		0.05		E353.2	06/05/14 13:16 / cm		FIA203-HE_140605B	70	R97740
Nitrogen, Total	0.88	mg/L		0.05		A4500 N-C	06/11/14 16:21 / cm	06/11/14 12:58	FIA203-HE_140612A	22	24900
Phosphorus, Total as P	0.323	mg/L		0.005		E365.1	06/06/14 11:20 / cm	06/06/14 09:54	FIA202-HE_140606A	41	24831
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Arsenic	0.013	mg/L		0.001		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Barium	0.034	mg/L		0.003		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:29 / sld		ICP2-HE_140605C	65	R97754
Cadmium	0.00008	mg/L		0.00003		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Copper	0.011	mg/L		0.001		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Iron	0.13	mg/L		0.02		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Lead	0.0005	mg/L		0.0003		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Manganese	0.118	mg/L		0.001		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Mercury	5.4E-06	mg/L		5E-06		E245.1	06/10/14 15:11 / sbk	06/09/14 08:04	HGCV202-H_140610A	54	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14060106-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	4	mg/L		1		E200.7	06/05/14 17:29 / sld		ICP2-HE_140605C	65	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Sodium	23	mg/L		1		E200.7	06/05/14 17:29 / sld		ICP2-HE_140605C	65	R97754
Uranium	0.0033	mg/L		0.0002		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
Zinc	0.017	mg/L		0.008		E200.8	06/11/14 21:59 / dck		ICPMS204-B_140611B	67	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.202	mg/L		0.009		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Arsenic	0.015	mg/L		0.001		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Barium	0.033	mg/L		0.003		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Cadmium	0.00027	mg/L		0.00003		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Calcium	37	mg/L		1		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Copper	0.022	mg/L		0.001		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Iron	0.55	mg/L		0.02		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Lead	0.0037	mg/L		0.0003		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Magnesium	8	mg/L		1		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Manganese	0.192	mg/L		0.001		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Mercury	0.000027	mg/L		5E-06		E245.1	06/10/14 15:16 / sbk	06/09/14 08:04	HGCV202-H_140610A	55	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Potassium	4	mg/L		1		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Sodium	24	mg/L		1		E200.7	06/09/14 12:40 / sld	06/05/14 09:20	ICP2-HE_140609A	39	24814
Uranium	0.0035	mg/L		0.0002		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14060106-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814
Zinc	0.057	mg/L		0.008		E200.8	06/11/14 22:25 / dck	06/05/14 09:20	ICPMS204-B_140611B	73	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14060106-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	18	mg/L		1		A2540 D	06/05/14 09:09 / blm		I24 (14410200)_140605A	29	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	92	mg/L		4		A2320 B	06/05/14 15:46 / SR		PHSC_101-H_140605A	128	R97712
Bicarbonate as HCO3	100	mg/L		4		A2320 B	06/05/14 15:46 / SR		PHSC_101-H_140605A	128	R97712
Chloride	21	mg/L		1		E300.0	06/05/14 19:56 / SR		IC102-H_140605A	41	R97753
Sulfate	56	mg/L		1		E300.0	06/05/14 19:56 / SR		IC102-H_140605A	41	R97753
Hardness as CaCO3	135	mg/L		1		A2340 B	06/05/14 17:32 / abb		CALC_140606A	795	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:32 / cm		FIA203-HE_140606E	45	R97804
Nitrogen, Nitrate+Nitrite as N	0.85	mg/L		0.05		E353.2	06/05/14 13:20 / cm		FIA203-HE_140605B	73	R97740
Nitrogen, Total	0.78	mg/L		0.05		A4500 N-C	06/11/14 16:22 / cm	06/11/14 12:58	FIA203-HE_140612A	23	24900
Phosphorus, Total as P	0.303	mg/L		0.005		E365.1	06/06/14 11:28 / cm	06/06/14 09:55	FIA202-HE_140606A	49	24832
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Arsenic	0.014	mg/L		0.001		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Barium	0.032	mg/L		0.003		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:32 / sld		ICP2-HE_140605C	66	R97754
Cadmium	0.00010	mg/L		0.00003		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Copper	0.012	mg/L		0.001		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Iron	0.13	mg/L		0.02		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Lead	0.0006	mg/L		0.0003		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Manganese	0.118	mg/L		0.001		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Mercury	5.8E-06	mg/L		5E-06		E245.1	06/10/14 15:20 / sbk	06/09/14 08:04	HGCV202-H_140610A	56	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14060106-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	5	mg/L		1		E200.7	06/05/14 17:32 / sld		ICP2-HE_140605C	66	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Sodium	25	mg/L		1		E200.7	06/05/14 17:32 / sld		ICP2-HE_140605C	66	R97754
Uranium	0.0031	mg/L		0.0002		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
Zinc	0.017	mg/L		0.008		E200.8	06/11/14 22:47 / dck		ICPMS204-B_140611B	78	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.195	mg/L		0.009		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Antimony	0.0005	mg/L		0.0005		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Arsenic	0.016	mg/L		0.001		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Barium	0.032	mg/L		0.003		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Cadmium	0.00029	mg/L		0.00003		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Calcium	38	mg/L		1		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Copper	0.022	mg/L		0.001		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Iron	0.49	mg/L		0.02		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Lead	0.0033	mg/L		0.0003		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Magnesium	9	mg/L		1		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Manganese	0.195	mg/L		0.001		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Mercury	0.000021	mg/L		5E-06		E245.1	06/10/14 15:32 / sbk	06/09/14 08:04	HGCV202-H_140610A	59	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Potassium	5	mg/L		1		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Sodium	25	mg/L		1		E200.7	06/09/14 13:02 / sld	06/05/14 09:20	ICP2-HE_140609A	45	24814
Uranium	0.0033	mg/L		0.0002		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14060106-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814
Zinc	0.058	mg/L		0.008		E200.8	06/11/14 22:51 / dck	06/05/14 09:20	ICPMS204-B_140611B	79	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14060106-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	12	mg/L		1		A2540 D	06/05/14 09:09 / blm		I24 (14410200)_140605A	30	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	79	mg/L		4		A2320 B	06/05/14 15:52 / SR		PHSC_101-H_140605A	130	R97712
Bicarbonate as HCO3	96	mg/L		4		A2320 B	06/05/14 15:52 / SR		PHSC_101-H_140605A	130	R97712
Chloride	8	mg/L		1		E300.0	06/05/14 20:08 / SR		IC102-H_140605A	42	R97753
Sulfate	33	mg/L		1		E300.0	06/05/14 20:08 / SR		IC102-H_140605A	42	R97753
Hardness as CaCO3	106	mg/L		1		A2340 B	06/05/14 17:36 / abb		CALC_140611A	124	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:33 / cm		FIA203-HE_140606E	46	R97804
Nitrogen, Nitrate+Nitrite as N	0.38	mg/L		0.05		E353.2	06/05/14 13:21 / cm		FIA203-HE_140605B	74	R97740
Nitrogen, Total	0.35	mg/L		0.05		A4500 N-C	06/11/14 16:24 / cm	06/11/14 12:58	FIA203-HE_140612A	24	24900
Phosphorus, Total as P	0.126	mg/L		0.005		E365.1	06/06/14 11:32 / cm	06/06/14 09:55	FIA202-HE_140606A	52	24832
METALS, DISSOLVED											
Aluminum	0.010	mg/L		0.009		E200.8	06/16/14 19:43 / dck		ICPMS204-B_140616B	19	R98050
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Barium	0.043	mg/L		0.003		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:36 / sld		ICP2-HE_140605C	67	R97754
Cadmium	0.00006	mg/L		0.00003		E200.8	06/16/14 19:43 / dck		ICPMS204-B_140616B	19	R98050
Chromium	ND	mg/L		0.01		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Copper	0.006	mg/L		0.001		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Iron	0.07	mg/L		0.02		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Manganese	0.062	mg/L		0.001		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Mercury	6.2E-06	mg/L		5E-06		E245.1	06/10/14 15:37 / sbk	06/09/14 09:37	HGCV202-H_140610A	60	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14060106-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 17:36 / sld		ICP2-HE_140605C	67	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Sodium	12	mg/L		1		E200.7	06/05/14 17:36 / sld		ICP2-HE_140605C	67	R97754
Uranium	0.0014	mg/L		0.0002		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
Zinc	0.025	mg/L		0.008		E200.8	06/11/14 22:55 / dck		ICPMS204-B_140611B	80	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.219	mg/L		0.009		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Barium	0.024	mg/L		0.003		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Cadmium	0.00034	mg/L		0.00003		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Calcium	31	mg/L		1		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Copper	0.011	mg/L		0.001		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Iron	0.30	mg/L		0.02		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Lead	0.0016	mg/L		0.0003		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Magnesium	6	mg/L		1		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Manganese	0.092	mg/L		0.001		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Mercury	0.000013	mg/L		5E-06		E245.1	06/10/14 15:41 / sbk	06/09/14 08:04	HGCV202-H_140610A	61	24851
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Potassium	2	mg/L		1		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Sodium	12	mg/L		1		E200.7	06/09/14 13:06 / sld	06/05/14 09:20	ICP2-HE_140609A	46	24814
Uranium	0.0015	mg/L		0.0002		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14060106-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814
Zinc	0.027	mg/L		0.008		E200.8	06/11/14 23:00 / dck	06/05/14 09:20	ICPMS204-B_140611B	81	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14060106-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	12	mg/L		1		A2540 D	06/05/14 09:10 / blm		I24 (14410200)_140605A	31	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	78	mg/L		4		A2320 B	06/05/14 15:57 / SR		PHSC_101-H_140605A	132	R97712
Bicarbonate as HCO3	94	mg/L		4		A2320 B	06/05/14 15:57 / SR		PHSC_101-H_140605A	132	R97712
Chloride	8	mg/L		1		E300.0	06/05/14 20:19 / SR		IC102-H_140605A	43	R97753
Sulfate	33	mg/L		1		E300.0	06/05/14 20:19 / SR		IC102-H_140605A	43	R97753
Hardness as CaCO3	105	mg/L		1		A2340 B	06/05/14 17:51 / abb		CALC_140606A	806	R97797
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:34 / cm		FIA203-HE_140606E	47	R97804
Nitrogen, Nitrate+Nitrite as N	0.39	mg/L		0.05		E353.2	06/05/14 13:22 / cm		FIA203-HE_140605B	75	R97740
Nitrogen, Total	0.9	mg/L	D	0.2		A4500 N-C	06/12/14 10:45 / cm	06/11/14 12:58	FIA203-HE_140612B	13	24900
Phosphorus, Total as P	0.130	mg/L		0.005		E365.1	06/06/14 11:33 / cm	06/06/14 09:55	FIA202-HE_140606A	53	24832
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	06/16/14 20:01 / dck		ICPMS204-B_140616B	23	R98050
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Barium	0.048	mg/L		0.003		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:51 / sld		ICP2-HE_140605C	71	R97754
Cadmium	0.00006	mg/L		0.00003		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Copper	0.008	mg/L		0.001		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Iron	0.07	mg/L		0.02		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Manganese	0.088	mg/L		0.001		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Mercury	6.2E-06	mg/L		5E-06		E245.1	06/11/14 10:08 / sbk	06/10/14 10:06	HGCV202-H_140611A	7	24881
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14060106-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 17:51 / sld		ICP2-HE_140605C	71	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Sodium	11	mg/L		1		E200.7	06/05/14 17:51 / sld		ICP2-HE_140605C	71	R97754
Uranium	0.0012	mg/L		0.0002		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
Zinc	0.032	mg/L		0.008		E200.8	06/11/14 23:04 / dck		ICPMS204-B_140611B	82	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.312	mg/L		0.009		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Barium	0.025	mg/L		0.003		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Cadmium	0.00020	mg/L		0.00003		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Calcium	30	mg/L		1		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Copper	0.016	mg/L		0.001		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Iron	0.39	mg/L		0.02		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Lead	0.0032	mg/L		0.0003		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Magnesium	6	mg/L		1		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Manganese	0.114	mg/L		0.001		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Mercury	0.000023	mg/L		5E-06		E245.1	06/11/14 10:12 / sbk	06/10/14 10:06	HGCV202-H_140611A	8	24881
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Potassium	3	mg/L		1		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Sodium	11	mg/L		1		E200.7	06/09/14 13:10 / sld	06/05/14 09:20	ICP2-HE_140609A	47	24814
Uranium	0.0013	mg/L		0.0002		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14060106-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814
Zinc	0.042	mg/L		0.008		E200.8	06/11/14 23:09 / dck	06/05/14 09:20	ICPMS204-B_140611B	83	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14060106-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	19	mg/L		1		A2540 D	06/05/14 09:10 / blm		I24 (14410200)_140605A	32	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	76	mg/L		4		A2320 B	06/05/14 16:02 / SR		PHSC_101-H_140605A	134	R97712
Bicarbonate as HCO3	92	mg/L		4		A2320 B	06/05/14 16:02 / SR		PHSC_101-H_140605A	134	R97712
Chloride	8	mg/L		1		E300.0	06/06/14 16:59 / SR		IC102-H_140606A	21	R97833
Sulfate	33	mg/L		1		E300.0	06/06/14 16:59 / SR		IC102-H_140606A	21	R97833
Hardness as CaCO3	104	mg/L		1		A2340 B	06/05/14 17:54 / abb		CALC_140611A	135	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:36 / cm		FIA203-HE_140606E	48	R97804
Nitrogen, Nitrate+Nitrite as N	0.40	mg/L		0.05		E353.2	06/05/14 13:23 / cm		FIA203-HE_140605B	76	R97740
Nitrogen, Total	0.89	mg/L	D	0.06		A4500 N-C	06/12/14 10:49 / cm	06/11/14 12:58	FIA203-HE_140612B	16	24900
Phosphorus, Total as P	0.148	mg/L		0.005		E365.1	06/06/14 11:34 / cm	06/06/14 09:55	FIA202-HE_140606A	54	24832
METALS, DISSOLVED											
Aluminum	0.009	mg/L		0.009		E200.8	06/16/14 20:05 / dck		ICPMS204-B_140616B	24	R98050
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Barium	0.029	mg/L		0.003		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 17:54 / sld		ICP2-HE_140605C	72	R97754
Cadmium	0.00008	mg/L		0.00003		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Copper	0.010	mg/L		0.001		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Iron	0.07	mg/L		0.02		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Manganese	0.066	mg/L		0.001		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Mercury	6.8E-06	mg/L		5E-06		E245.1	06/11/14 10:16 / sbk	06/10/14 10:06	HGCV202-H_140611A	9	24881
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14060106-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 17:54 / sld		ICP2-HE_140605C	72	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Sodium	11	mg/L		1		E200.7	06/05/14 17:54 / sld		ICP2-HE_140605C	72	R97754
Uranium	0.0012	mg/L		0.0002		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
Zinc	0.027	mg/L		0.008		E200.8	06/11/14 23:13 / dck		ICPMS204-B_140611B	84	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.478	mg/L		0.009		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Barium	0.029	mg/L		0.003		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Cadmium	0.00038	mg/L		0.00003		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Calcium	31	mg/L		1		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Copper	0.023	mg/L		0.001		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Iron	0.57	mg/L		0.02		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Lead	0.0040	mg/L		0.0003		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Magnesium	6	mg/L		1		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Manganese	0.122	mg/L		0.001		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Mercury	0.000032	mg/L		5E-06		E245.1	06/11/14 10:29 / sbk	06/10/14 10:06	HGCV202-H_140611A	12	24881
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Potassium	3	mg/L		1		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Sodium	11	mg/L		1		E200.7	06/09/14 13:13 / sld	06/05/14 09:20	ICP2-HE_140609A	48	24814
Uranium	0.0014	mg/L		0.0002		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14060106-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814
Zinc	0.058	mg/L		0.008		E200.8	06/11/14 23:31 / dck	06/05/14 09:20	ICPMS204-B_140611B	88	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14060106-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	21	mg/L		1		A2540 D	06/05/14 09:11 / blm		I24 (14410200)_140605A	33	TSS140605A
INORGANICS											
Alkalinity, Total as CaCO3	78	mg/L		4		A2320 B	06/06/14 12:11 / SR		PHSC_101-H_140606A	9	R97750
Bicarbonate as HCO3	94	mg/L		4		A2320 B	06/06/14 12:11 / SR		PHSC_101-H_140606A	9	R97750
Chloride	9	mg/L		1		E300.0	06/06/14 17:10 / SR		IC102-H_140606A	22	R97833
Sulfate	34	mg/L		1		E300.0	06/06/14 17:10 / SR		IC102-H_140606A	22	R97833
Hardness as CaCO3	110	mg/L		1		A2340 B	06/05/14 18:06 / abb		CALC_140611A	256	R97916
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	06/06/14 15:37 / cm		FIA203-HE_140606E	49	R97804
Nitrogen, Nitrate+Nitrite as N	0.46	mg/L		0.05		E353.2	06/05/14 13:24 / cm		FIA203-HE_140605B	77	R97740
Nitrogen, Total	0.98	mg/L	D	0.06		A4500 N-C	06/12/14 10:50 / cm	06/11/14 12:58	FIA203-HE_140612B	17	24900
Phosphorus, Total as P	0.154	mg/L		0.005		E365.1	06/06/14 11:35 / cm	06/06/14 09:55	FIA202-HE_140606A	55	24832
METALS, DISSOLVED											
Aluminum	0.009	mg/L		0.009		E200.8	06/16/14 20:09 / dck		ICPMS204-B_140616B	25	R98050
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Arsenic	0.008	mg/L		0.001		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Barium	0.030	mg/L		0.003		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Boron	ND	mg/L		0.1		E200.7	06/05/14 18:06 / sld		ICP2-HE_140605C	75	R97754
Cadmium	0.00009	mg/L		0.00003		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Copper	0.010	mg/L		0.001		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Iron	0.07	mg/L		0.02		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Lead	0.0004	mg/L		0.0003		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Manganese	0.065	mg/L		0.001		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Mercury	7.1E-06	mg/L		5E-06		E245.1	06/11/14 10:33 / sbk	06/10/14 10:06	HGCV202-H_140611A	13	24881
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14060106-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Potassium	2	mg/L		1		E200.7	06/05/14 18:06 / sld		ICP2-HE_140605C	75	R97754
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Sodium	12	mg/L		1		E200.7	06/05/14 18:06 / sld		ICP2-HE_140605C	75	R97754
Uranium	0.0014	mg/L		0.0002		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
Zinc	0.034	mg/L		0.008		E200.8	06/11/14 23:35 / dck		ICPMS204-B_140611B	89	R98002
METALS, TOTAL RECOVERABLE											
Aluminum	0.460	mg/L		0.009		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Antimony	ND	mg/L		0.0005		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Arsenic	0.009	mg/L		0.001		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Barium	0.030	mg/L		0.003		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Beryllium	ND	mg/L		0.0008		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Boron	ND	mg/L		0.1		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Cadmium	0.00026	mg/L		0.00003		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Calcium	31	mg/L		1		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Chromium	ND	mg/L		0.01		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Cobalt	ND	mg/L		0.01		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Copper	0.025	mg/L		0.001		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Iron	0.56	mg/L		0.02		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Lead	0.0042	mg/L		0.0003		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Magnesium	6	mg/L		1		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Manganese	0.123	mg/L		0.001		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Mercury	0.000038	mg/L		5E-06		E245.1	06/11/14 10:37 / sbk	06/10/14 10:06	HGCV202-H_140611A	14	24881
Molybdenum	ND	mg/L		0.005		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Nickel	ND	mg/L		0.002		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Potassium	3	mg/L		1		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Selenium	ND	mg/L		0.001		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Silver	ND	mg/L		0.0002		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Sodium	12	mg/L		1		E200.7	06/09/14 13:17 / sld	06/05/14 09:20	ICP2-HE_140609A	49	24814
Uranium	0.0015	mg/L		0.0002		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14060106-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Vanadium	ND	mg/L		0.1		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814
Zinc	0.065	mg/L		0.008		E200.8	06/11/14 23:39 / dck	06/05/14 09:20	ICPMS204-B_140611B	90	24814

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Lab ID: H14060106-017
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	5.4	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	10	R98310
PHYSICAL CHARACTERISTICS											
Moisture	58.8	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	11	R98453
3050 EXTRACTABLE METALS											
Aluminum	8640	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Arsenic	32	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Barium	111	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Cadmium	3.0	mg/kg		0.2		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Chromium	15	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Copper	334	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Iron	12300	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Lead	164	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Manganese	639	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Molybdenum	8	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Nickel	9	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	79	25047
Vanadium	34	mg/kg		1		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
Zinc	831	mg/kg		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	113	25047
METALS, TOTAL											
Mercury	0.38	mg/kg		0.10		SW7471B	06/20/14 11:24 / sbk	06/19/14 11:31	HGCV201-H_140620A	19	25007
METAL, DRY WEIGHT											
Aluminum	21000	mg/kg-dry		9		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Lab ID: H14060106-017
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Arsenic	85	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Barium	268	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Cadmium	7.3	mg/kg-dry		0.2		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Chromium	38	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Cobalt	12	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Copper	810	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Iron	29700	mg/kg-dry		8		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Lead	398	mg/kg-dry		8		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Manganese	1550	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Molybdenum	18	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Nickel	22	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Silver	5	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Uranium	7	mg/kg-dry		5		SW6020	06/25/14 16:37 / dck	06/24/14 08:12	ICPMS204-B_140625A	225	25047
Vanadium	82	mg/kg-dry		2		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Zinc	2010	mg/kg-dry		5		SW6010B	06/25/14 23:09 / sld	06/24/14 08:12	ICP2-HE_140625A	387	25047
Mercury	0.92	mg/kg-dry		0.10		SW7471B	06/20/14 11:24 / sbk	06/19/14 11:31	HGCV201-H_140620A	58	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Lab ID: H14060106-018
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	29.6	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	11	R98310
PHYSICAL CHARACTERISTICS											
Moisture	25.3	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	12	R98453
3050 EXTRACTABLE METALS											
Aluminum	4080	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Arsenic	21	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Barium	64	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Cadmium	1.1	mg/kg		0.2		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Chromium	8	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Copper	215	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Iron	17200	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Lead	50	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Manganese	353	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	138	25048
Vanadium	36	mg/kg		1		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
Zinc	387	mg/kg		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	141	25048
METALS, TOTAL											
Mercury	0.21	mg/kg		0.10		SW7471B	06/20/14 11:31 / sbk	06/19/14 11:31	HGCV201-H_140620A	22	25007
METAL, DRY WEIGHT											
Aluminum	5460	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Lab ID: H14060106-018
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Arsenic	28	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Barium	85	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Cadmium	1.5	mg/kg-dry		0.2		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Chromium	10	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Cobalt	6	mg/kg-dry		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Copper	288	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Iron	23000	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Lead	66	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Manganese	473	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Nickel	5	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:13 / dck	06/24/14 08:17	ICPMS204-B_140625A	234	25048
Vanadium	48	mg/kg-dry		1		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Zinc	518	mg/kg-dry		5		SW6010B	06/26/14 00:52 / sld	06/24/14 08:17	ICP2-HE_140625A	407	25048
Mercury	0.28	mg/kg-dry		0.10		SW7471B	06/20/14 11:31 / sbk	06/19/14 11:31	HGCV201-H_140620A	61	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14060106-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	34.8	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	12	R98310
PHYSICAL CHARACTERISTICS											
Moisture	11.4	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	14	R98453
3050 EXTRACTABLE METALS											
Aluminum	2160	mg/kg		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	162	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Arsenic	17	mg/kg		5		SW6010B	07/03/14 01:30 / sld	06/30/14 08:18	ICP2-HE_140702A	193	25136
Barium	41	mg/kg		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	93	25136
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	162	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Cadmium	0.4	mg/kg		0.2		SW6020	06/26/14 21:11 / dck	06/24/14 08:17	ICPMS204-B_140626B	83	25049
Chromium	ND	mg/kg		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	162	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Copper	76	mg/kg		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	93	25136
Iron	6100	mg/kg		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	93	25136
Lead	22	mg/kg		5		SW6010B	07/08/14 15:20 / sld	06/30/14 08:18	ICP2-HE_140708B	78	25136
Manganese	342	mg/kg		5		SW6010B	07/02/14 00:25 / sld	06/30/14 08:18	ICP2-HE_140701B	172	25136
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	162	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	162	25049
Vanadium	14	mg/kg		1		SW6010B	07/02/14 00:25 / sld	06/30/14 08:18	ICP2-HE_140701B	172	25136
Zinc	215	mg/kg		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	93	25136
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 11:33 / sbk	06/19/14 11:31	HGCV201-H_140620A	23	25007
METAL, DRY WEIGHT											
Aluminum	2430	mg/kg-dry		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	425	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14060106-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 15:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Arsenic	19	mg/kg-dry		5		SW6010B	07/03/14 01:30 / sld	06/30/14 08:18	ICP2-HE_140702A	627	25136
Barium	47	mg/kg-dry		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	381	25136
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	425	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Cadmium	0.5	mg/kg-dry		0.2		SW6020	06/26/14 21:11 / dck	06/24/14 08:17	ICPMS204-B_140626B	251	25049
Chromium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	425	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Copper	86	mg/kg-dry		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	381	25136
Iron	6890	mg/kg-dry		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	381	25136
Lead	24	mg/kg-dry		5		SW6010B	07/08/14 15:20 / sld	06/30/14 08:18	ICP2-HE_140708B	374	25136
Manganese	386	mg/kg-dry		5		SW6010B	07/02/14 00:25 / sld	06/30/14 08:18	ICP2-HE_140701B	214	25136
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 02:09 / sld	06/24/14 08:17	ICP2-HE_140625A	425	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 22:59 / dck	06/24/14 08:17	ICPMS204-B_140625A	244	25049
Vanadium	16	mg/kg-dry		1		SW6010B	07/02/14 00:25 / sld	06/30/14 08:18	ICP2-HE_140701B	214	25136
Zinc	243	mg/kg-dry		5		SW6010B	07/08/14 16:16 / sld	06/30/14 08:18	ICP2-HE_140708B	381	25136
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/20/14 11:33 / sbk	06/19/14 11:31	HGCV201-H_140620A	62	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14060106-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.4	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	13	R98310
PHYSICAL CHARACTERISTICS											
Moisture	54.8	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	15	R98453
3050 EXTRACTABLE METALS											
Aluminum	10800	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Arsenic	43	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Barium	176	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Cadmium	3.9	mg/kg		0.2		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Chromium	22	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Cobalt	7	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Copper	407	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Iron	15200	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Lead	206	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Manganese	1720	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Molybdenum	7	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Nickel	12	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	80	25047
Vanadium	47	mg/kg		1		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
Zinc	968	mg/kg		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	114	25047
METALS, TOTAL											
Mercury	0.44	mg/kg		0.10		SW7471B	06/20/14 12:14 / sbk	06/19/14 11:31	HGCV201-H_140620A	36	25007
METAL, DRY WEIGHT											
Aluminum	23900	mg/kg-dry		7		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14060106-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Arsenic	106	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Barium	391	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Cadmium	8.5	mg/kg-dry		0.2		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Chromium	49	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Cobalt	15	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Copper	901	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Iron	33600	mg/kg-dry		7		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Lead	456	mg/kg-dry		7		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Manganese	3800	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Molybdenum	15	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Nickel	27	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Silver	6	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Uranium	6	mg/kg-dry		5		SW6020	06/25/14 16:41 / dck	06/24/14 08:12	ICPMS204-B_140625A	226	25047
Vanadium	104	mg/kg-dry		2		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Zinc	2140	mg/kg-dry		5		SW6010B	06/25/14 23:12 / sld	06/24/14 08:12	ICP2-HE_140625A	388	25047
Mercury	0.97	mg/kg-dry		0.10		SW7471B	06/20/14 12:14 / sbk	06/19/14 11:31	HGCV201-H_140620A	75	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14060106-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	49.7	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	14	R98310
PHYSICAL CHARACTERISTICS											
Moisture	26.2	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	16	R98453
3050 EXTRACTABLE METALS											
Aluminum	4100	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Arsenic	12	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Barium	70	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Cadmium	0.9	mg/kg		0.2		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Chromium	6	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Copper	108	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Iron	8410	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Lead	54	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Manganese	628	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	139	25048
Vanadium	20	mg/kg		1		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
Zinc	353	mg/kg		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	142	25048
METALS, TOTAL											
Mercury	0.17	mg/kg		0.10		SW7471B	06/20/14 11:38 / sbk	06/19/14 11:31	HGCV201-H_140620A	25	25007
METAL, DRY WEIGHT											
Aluminum	5550	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14060106-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Arsenic	17	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Barium	94	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Cadmium	1.2	mg/kg-dry		0.2		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Chromium	8	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Cobalt	5	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Copper	146	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Iron	11400	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Lead	72	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Manganese	850	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	235	25048
Vanadium	28	mg/kg-dry		1		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Zinc	478	mg/kg-dry		5		SW6010B	06/26/14 00:56 / sld	06/24/14 08:17	ICP2-HE_140625A	408	25048
Mercury	0.24	mg/kg-dry		0.10		SW7471B	06/20/14 11:38 / sbk	06/19/14 11:31	HGCV201-H_140620A	64	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14060106-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	37.4	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	15	R98310
PHYSICAL CHARACTERISTICS											
Moisture	19.2	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	17	R98453
3050 EXTRACTABLE METALS											
Aluminum	3090	mg/kg		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Arsenic	15	mg/kg		5		SW6010B	07/08/14 17:33 / sld	06/30/14 08:16	ICP2-HE_140708B	114	25135
Barium	80	mg/kg		5		SW6010B	07/03/14 21:15 / sld	06/30/14 08:16	ICP2-HE_140702A	480	25135
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Cadmium	0.4	mg/kg		0.2		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Chromium	ND	mg/kg		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Copper	57	mg/kg		5		SW6010B	07/02/14 01:02 / sld	06/30/14 08:18	ICP2-HE_140701B	182	25136
Iron	6600	mg/kg		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Lead	35	mg/kg		5		SW6010B	07/08/14 16:20 / sld	06/30/14 08:18	ICP2-HE_140708B	94	25136
Manganese	549	mg/kg		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	163	25049
Vanadium	15	mg/kg		1		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	163	25049
Zinc	178	mg/kg		5		SW6010B	07/03/14 01:33 / sld	06/30/14 08:18	ICP2-HE_140702A	194	25136
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/20/14 11:40 / sbk	06/19/14 11:31	HGCV201-H_140620A	26	25007
METAL, DRY WEIGHT											
Aluminum	3820	mg/kg-dry		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14060106-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 14:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Arsenic	18	mg/kg-dry		5		SW6010B	07/08/14 17:33 / sld	06/30/14 08:16	ICP2-HE_140708B	400	25135
Barium	99	mg/kg-dry		5		SW6010B	07/03/14 21:15 / sld	06/30/14 08:16	ICP2-HE_140702A	650	25135
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Cadmium	0.5	mg/kg-dry		0.2		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Chromium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Copper	71	mg/kg-dry		5		SW6010B	07/02/14 01:02 / sld	06/30/14 08:18	ICP2-HE_140701B	219	25136
Iron	8170	mg/kg-dry		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049
Lead	44	mg/kg-dry		5		SW6010B	07/08/14 16:20 / sld	06/30/14 08:18	ICP2-HE_140708B	382	25136
Manganese	679	mg/kg-dry		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:03 / dck	06/24/14 08:17	ICPMS204-B_140625A	245	25049
Vanadium	19	mg/kg-dry		1		SW6010B	06/26/14 02:13 / sld	06/24/14 08:17	ICP2-HE_140625A	426	25049
Zinc	220	mg/kg-dry		5		SW6010B	07/03/14 01:33 / sld	06/30/14 08:18	ICP2-HE_140702A	628	25136
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/20/14 11:40 / sbk	06/19/14 11:31	HGCV201-H_140620A	65	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Lab ID: H14060106-023
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.5	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	16	R98310
PHYSICAL CHARACTERISTICS											
Moisture	74.0	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	18	R98453
3050 EXTRACTABLE METALS											
Aluminum	6590	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Arsenic	20	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Barium	113	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Cadmium	2.2	mg/kg		0.2		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Chromium	55	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Copper	240	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Iron	9680	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Lead	137	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Manganese	485	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Molybdenum	5	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Nickel	28	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	81	25047
Vanadium	21	mg/kg		1		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
Zinc	507	mg/kg		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	115	25047
METALS, TOTAL											
Mercury	0.45	mg/kg		0.10		SW7471B	06/20/14 12:17 / sbk	06/19/14 11:31	HGCV201-H_140620A	37	25007
METAL, DRY WEIGHT											
Aluminum	25300	mg/kg-dry		10		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Collection Date: 06/03/14 13:15
DateReceived: 06/04/14
Lab ID: H14060106-023
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Arsenic	84	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Barium	433	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Boron	ND	mg/kg-dry		20		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Cadmium	8.6	mg/kg-dry		0.3		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Chromium	210	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Cobalt	15	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Copper	924	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Iron	37200	mg/kg-dry		10		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Lead	526	mg/kg-dry		10		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Manganese	1860	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Molybdenum	19	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Nickel	108	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Silver	5	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Uranium	10	mg/kg-dry		5		SW6020	06/25/14 16:46 / dck	06/24/14 08:12	ICPMS204-B_140625A	227	25047
Vanadium	79	mg/kg-dry		3		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Zinc	1950	mg/kg-dry		5		SW6010B	06/25/14 23:16 / sld	06/24/14 08:12	ICP2-HE_140625A	389	25047
Mercury	1.7	mg/kg-dry		0.10		SW7471B	06/20/14 12:17 / sbk	06/19/14 11:31	HGCV201-H_140620A	76	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14060106-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	12.8	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	17	R98310
PHYSICAL CHARACTERISTICS											
Moisture	44.3	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	19	R98453
3050 EXTRACTABLE METALS											
Aluminum	5200	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Arsenic	38	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Barium	84	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Cadmium	2.2	mg/kg		0.2		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Chromium	8	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Copper	275	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Iron	9580	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Lead	71	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Manganese	346	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	140	25048
Vanadium	20	mg/kg		1		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
Zinc	415	mg/kg		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	143	25048
METALS, TOTAL											
Mercury	0.43	mg/kg		0.10		SW7471B	06/20/14 11:45 / sbk	06/19/14 11:31	HGCV201-H_140620A	28	25007
METAL, DRY WEIGHT											
Aluminum	9340	mg/kg-dry		6		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14060106-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Arsenic	68	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Barium	150	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Boron	ND	mg/kg-dry		8		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Cadmium	4.0	mg/kg-dry		0.2		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Chromium	15	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Cobalt	6	mg/kg-dry		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Copper	494	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Iron	17200	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Lead	127	mg/kg-dry		6		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Manganese	622	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Nickel	8	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:22 / dck	06/24/14 08:17	ICPMS204-B_140625A	236	25048
Vanadium	36	mg/kg-dry		1		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Zinc	745	mg/kg-dry		5		SW6010B	06/26/14 00:59 / sld	06/24/14 08:17	ICP2-HE_140625A	409	25048
Mercury	0.78	mg/kg-dry		0.10		SW7471B	06/20/14 11:45 / sbk	06/19/14 11:31	HGCV201-H_140620A	67	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14060106-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	33.2	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	18	R98310
PHYSICAL CHARACTERISTICS											
Moisture	12.0	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	20	R98453
3050 EXTRACTABLE METALS											
Aluminum	2600	mg/kg		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Arsenic	5	mg/kg		5		SW6010B	07/08/14 16:23 / sld	06/30/14 08:18	ICP2-HE_140708B	95	25136
Barium	38	mg/kg		5		SW6010B	07/08/14 17:37 / sld	06/30/14 08:16	ICP2-HE_140708B	115	25135
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Cadmium	0.5	mg/kg		0.2		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Chromium	ND	mg/kg		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Copper	56	mg/kg		5		SW6010B	07/02/14 01:06 / sld	06/30/14 08:18	ICP2-HE_140701B	183	25136
Iron	4820	mg/kg		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Lead	21	mg/kg		5		SW6010B	07/08/14 16:23 / sld	06/30/14 08:18	ICP2-HE_140708B	95	25136
Manganese	142	mg/kg		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	164	25049
Vanadium	11	mg/kg		1		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	164	25049
Zinc	100	mg/kg		5		SW6010B	07/08/14 16:23 / sld	06/30/14 08:18	ICP2-HE_140708B	95	25136
METALS, TOTAL											
Mercury	0.22	mg/kg		0.10		SW7471B	06/20/14 11:55 / sbk	06/19/14 11:31	HGCV201-H_140620A	32	25007
METAL, DRY WEIGHT											
Aluminum	2960	mg/kg-dry		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14060106-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 13:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Arsenic	6	mg/kg-dry		5		SW6010B	07/08/14 16:23 / sld	06/30/14 08:18	ICP2-HE_140708B	383	25136
Barium	43	mg/kg-dry		5		SW6010B	07/08/14 17:37 / sld	06/30/14 08:16	ICP2-HE_140708B	401	25135
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Cadmium	0.6	mg/kg-dry		0.2		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Chromium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Copper	64	mg/kg-dry		5		SW6010B	07/02/14 01:06 / sld	06/30/14 08:18	ICP2-HE_140701B	220	25136
Iron	5480	mg/kg-dry		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049
Lead	24	mg/kg-dry		5		SW6010B	07/08/14 16:23 / sld	06/30/14 08:18	ICP2-HE_140708B	383	25136
Manganese	161	mg/kg-dry		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:08 / dck	06/24/14 08:17	ICPMS204-B_140625A	246	25049
Vanadium	12	mg/kg-dry		1		SW6010B	06/26/14 02:17 / sld	06/24/14 08:17	ICP2-HE_140625A	427	25049
Zinc	114	mg/kg-dry		5		SW6010B	07/08/14 16:23 / sld	06/30/14 08:18	ICP2-HE_140708B	383	25136
Mercury	0.25	mg/kg-dry		0.10		SW7471B	06/20/14 11:55 / sbk	06/19/14 11:31	HGCV201-H_140620A	71	25007

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Lab ID: H14060106-026
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	18.4	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	19	R98310
PHYSICAL CHARACTERISTICS											
Moisture	77.9	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	21	R98453
3050 EXTRACTABLE METALS											
Aluminum	7190	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Arsenic	14	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Barium	74	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Cadmium	2.6	mg/kg		0.2		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Chromium	17	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Copper	167	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Iron	7130	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Lead	62	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Manganese	406	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Nickel	10	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	82	25047
Vanadium	15	mg/kg		1		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
Zinc	472	mg/kg		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	118	25047
METALS, TOTAL											
Mercury	0.30	mg/kg		0.10		SW7471B	06/24/14 10:24 / sbk	06/23/14 09:48	HGCV201-H_140624A	7	25024
METAL, DRY WEIGHT											
Aluminum	32600	mg/kg-dry		10		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-026
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Arsenic	63	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Barium	335	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Boron	ND	mg/kg-dry		20		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Cadmium	11.7	mg/kg-dry		0.3		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Chromium	78	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Cobalt	15	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Copper	757	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Iron	32200	mg/kg-dry		10		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Lead	282	mg/kg-dry		10		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Manganese	1840	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Molybdenum	9	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Nickel	46	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Uranium	10	mg/kg-dry		5		SW6020	06/25/14 16:50 / dck	06/24/14 08:12	ICPMS204-B_140625A	228	25047
Vanadium	67	mg/kg-dry		3		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Zinc	2140	mg/kg-dry		5		SW6010B	06/25/14 23:27 / sld	06/24/14 08:12	ICP2-HE_140625A	392	25047
Mercury	1.4	mg/kg-dry		0.10		SW7471B	06/24/14 10:24 / sbk	06/23/14 09:48	HGCV201-H_140624A	77	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Lab ID: H14060106-027
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	30.8	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	20	R98310
PHYSICAL CHARACTERISTICS											
Moisture	56.0	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	22	R98453
3050 EXTRACTABLE METALS											
Aluminum	8150	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Arsenic	11	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Barium	117	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Cadmium	2.4	mg/kg		0.2		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Chromium	8	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Copper	161	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Iron	11500	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Lead	70	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Manganese	562	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	144	25048
Vanadium	26	mg/kg		1		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
Zinc	397	mg/kg		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	144	25048
METALS, TOTAL											
Mercury	0.35	mg/kg		0.10		SW7471B	06/24/14 10:27 / sbk	06/23/14 09:48	HGCV201-H_140624A	8	25024
METAL, DRY WEIGHT											
Aluminum	18500	mg/kg-dry		7		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-027
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Arsenic	26	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Barium	265	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Cadmium	5.5	mg/kg-dry		0.2		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Chromium	18	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Cobalt	10	mg/kg-dry		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Copper	367	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Iron	26000	mg/kg-dry		6		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Lead	159	mg/kg-dry		7		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Manganese	1280	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Nickel	11	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Uranium	5	mg/kg-dry		5		SW6020	06/25/14 21:40 / dck	06/24/14 08:17	ICPMS204-B_140625A	237	25048
Vanadium	60	mg/kg-dry		2		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Zinc	901	mg/kg-dry		5		SW6010B	06/26/14 01:03 / sld	06/24/14 08:17	ICP2-HE_140625A	410	25048
Mercury	0.79	mg/kg-dry		0.10		SW7471B	06/24/14 10:27 / sbk	06/23/14 09:48	HGCV201-H_140624A	78	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14060106-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	7.4	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	21	R98310
PHYSICAL CHARACTERISTICS											
Moisture	43.3	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	23	R98453
3050 EXTRACTABLE METALS											
Aluminum	9670	mg/kg		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Arsenic	7	mg/kg		5		SW6010B	07/08/14 16:34 / sld	06/30/14 08:18	ICP2-HE_140708B	98	25136
Barium	134	mg/kg		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Cadmium	1.2	mg/kg		0.2		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Chromium	ND	mg/kg		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Copper	63	mg/kg		5		SW6010B	07/03/14 21:30 / sld	06/30/14 08:16	ICP2-HE_140702A	484	25135
Iron	8180	mg/kg		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Lead	32	mg/kg		5		SW6010B	07/08/14 16:34 / sld	06/30/14 08:18	ICP2-HE_140708B	98	25136
Manganese	563	mg/kg		5		SW6010B	07/02/14 01:10 / sld	06/30/14 08:18	ICP2-HE_140701B	184	25136
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	165	25049
Vanadium	14	mg/kg		1		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	165	25049
Zinc	184	mg/kg		5		SW6010B	07/03/14 01:41 / sld	06/30/14 08:18	ICP2-HE_140702A	196	25136
METALS, TOTAL											
Mercury	0.10	mg/kg		0.10		SW7471B	06/24/14 10:36 / sbk	06/23/14 09:48	HGCV201-H_140624A	12	25024
METAL, DRY WEIGHT											
Aluminum	17100	mg/kg-dry		6		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14060106-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Arsenic	12	mg/kg-dry		5		SW6010B	07/08/14 16:34 / sld	06/30/14 08:18	ICP2-HE_140708B	386	25136
Barium	236	mg/kg-dry		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Boron	ND	mg/kg-dry		8		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Cadmium	2.1	mg/kg-dry		0.2		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Chromium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Copper	112	mg/kg-dry		5		SW6010B	07/03/14 21:30 / sld	06/30/14 08:16	ICP2-HE_140702A	654	25135
Iron	14400	mg/kg-dry		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Lead	56	mg/kg-dry		6		SW6010B	07/08/14 16:34 / sld	06/30/14 08:18	ICP2-HE_140708B	386	25136
Manganese	993	mg/kg-dry		5		SW6010B	07/02/14 01:10 / sld	06/30/14 08:18	ICP2-HE_140701B	221	25136
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:12 / dck	06/24/14 08:17	ICPMS204-B_140625A	247	25049
Vanadium	25	mg/kg-dry		1		SW6010B	06/26/14 02:21 / sld	06/24/14 08:17	ICP2-HE_140625A	428	25049
Zinc	325	mg/kg-dry		5		SW6010B	07/03/14 01:41 / sld	06/30/14 08:18	ICP2-HE_140702A	630	25136
Mercury	0.18	mg/kg-dry		0.10		SW7471B	06/24/14 10:36 / sbk	06/23/14 09:48	HGCV201-H_140624A	82	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Lab ID: H14060106-029
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	13.9	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	22	R98310
PHYSICAL CHARACTERISTICS											
Moisture	75.8	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	25	R98453
3050 EXTRACTABLE METALS											
Aluminum	11500	mg/kg		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Arsenic	11	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Barium	76	mg/kg		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 19:27 / sld	06/20/14 16:05	ICP2-HE_140625A	53	25019
Cadmium	4.1	mg/kg		0.2		SW6020	06/26/14 19:40 / dck	06/20/14 16:05	ICPMS204-B_140626B	64	25019
Chromium	79	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Copper	109	mg/kg		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Iron	11000	mg/kg		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Lead	97	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Manganese	345	mg/kg		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Nickel	33	mg/kg		5		SW6010B	06/25/14 19:27 / sld	06/20/14 16:05	ICP2-HE_140625A	53	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	58	25019
Vanadium	19	mg/kg		1		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	135	25019
Zinc	285	mg/kg		5		SW6010B	06/25/14 19:27 / sld	06/20/14 16:05	ICP2-HE_140625A	53	25019
METALS, TOTAL											
Mercury	0.15	mg/kg		0.10		SW7471B	06/24/14 10:39 / sbk	06/23/14 09:48	HGCV201-H_140624A	13	25024
METAL, DRY WEIGHT											
Aluminum	47600	mg/kg-dry		10		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Lab ID: H14060106-029
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Arsenic	47	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Barium	315	mg/kg-dry		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019
Boron	11	mg/kg-dry		5		SW6010B	06/25/14 19:27 / sld	06/20/14 16:05	ICP2-HE_140625A	355	25019
Cadmium	17.2	mg/kg-dry		0.7		SW6020	06/26/14 19:40 / dck	06/20/14 16:05	ICPMS204-B_140626B	256	25019
Chromium	329	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Cobalt	17	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Copper	451	mg/kg-dry		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019
Iron	45700	mg/kg-dry		10		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019
Lead	400	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Manganese	1430	mg/kg-dry		5		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019
Molybdenum	13	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Nickel	138	mg/kg-dry		5		SW6010B	06/25/14 19:27 / sld	06/20/14 16:05	ICP2-HE_140625A	355	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Uranium	12	mg/kg-dry		5		SW6020	06/25/14 00:19 / dck	06/20/14 16:05	ICPMS204-B_140624B	162	25019
Vanadium	78	mg/kg-dry		3		SW6010B	06/25/14 00:15 / sld	06/20/14 16:05	ICP2-HE_140624B	238	25019
Zinc	1180	mg/kg-dry		5		SW6010B	06/25/14 19:27 / sld	06/20/14 16:05	ICP2-HE_140625A	355	25019
Mercury	0.61	mg/kg-dry		0.10		SW7471B	06/24/14 10:39 / sbk	06/23/14 09:48	HGCV201-H_140624A	83	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Lab ID: H14060106-030
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	36.4	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	23	R98310
PHYSICAL CHARACTERISTICS											
Moisture	29.2	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	26	R98453
3050 EXTRACTABLE METALS											
Aluminum	4580	mg/kg		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Barium	50	mg/kg		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 19:31 / sld	06/20/14 16:05	ICP2-HE_140625A	54	25019
Cadmium	0.9	mg/kg		0.2		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Chromium	18	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Copper	76	mg/kg		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Iron	23700	mg/kg		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Lead	17	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Manganese	166	mg/kg		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 19:31 / sld	06/20/14 16:05	ICP2-HE_140625A	54	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	59	25019
Vanadium	73	mg/kg		1		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	136	25019
Zinc	128	mg/kg		5		SW6010B	06/25/14 19:31 / sld	06/20/14 16:05	ICP2-HE_140625A	54	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 10:41 / sbk	06/23/14 09:48	HGCV201-H_140624A	14	25024
METAL, DRY WEIGHT											
Aluminum	6470	mg/kg-dry		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Lab ID: H14060106-030
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Arsenic	7	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Barium	71	mg/kg-dry		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 19:31 / sld	06/20/14 16:05	ICP2-HE_140625A	356	25019
Cadmium	1.3	mg/kg-dry		0.2		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Chromium	25	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Cobalt	5	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Copper	108	mg/kg-dry		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019
Iron	33400	mg/kg-dry		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019
Lead	25	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Manganese	234	mg/kg-dry		5		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Nickel	6	mg/kg-dry		5		SW6010B	06/25/14 19:31 / sld	06/20/14 16:05	ICP2-HE_140625A	356	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 00:23 / dck	06/20/14 16:05	ICPMS204-B_140624B	163	25019
Vanadium	103	mg/kg-dry		1		SW6010B	06/25/14 00:19 / sld	06/20/14 16:05	ICP2-HE_140624B	239	25019
Zinc	181	mg/kg-dry		5		SW6010B	06/25/14 19:31 / sld	06/20/14 16:05	ICP2-HE_140625A	356	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 10:41 / sbk	06/23/14 09:48	HGCV201-H_140624A	84	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14060106-031
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 11:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	14.9	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	24	R98310
PHYSICAL CHARACTERISTICS											
Moisture	19.4	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	27	R98453
3050 EXTRACTABLE METALS											
Aluminum	2990	mg/kg		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	137	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Barium	31	mg/kg		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	137	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	137	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 19:35 / sld	06/20/14 16:05	ICP2-HE_140625A	55	25019
Cadmium	0.3	mg/kg		0.2		SW6020	06/26/14 19:45 / dck	06/20/14 16:05	ICPMS204-B_140626B	65	25019
Chromium	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Copper	16	mg/kg		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	137	25019
Iron	3800	mg/kg		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	137	25019
Lead	7	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Manganese	92	mg/kg		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	137	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 19:35 / sld	06/20/14 16:05	ICP2-HE_140625A	55	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Vanadium	8	mg/kg		1		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	60	25019
Zinc	60	mg/kg		5		SW6010B	06/25/14 19:35 / sld	06/20/14 16:05	ICP2-HE_140625A	55	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 10:43 / sbk	06/23/14 09:48	HGCV201-H_140624A	15	25024
METAL, DRY WEIGHT											
Aluminum	3710	mg/kg-dry		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	240	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14060106-031
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 11:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Arsenic	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Barium	39	mg/kg-dry		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	240	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	240	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 19:35 / sld	06/20/14 16:05	ICP2-HE_140625A	357	25019
Cadmium	0.4	mg/kg-dry		0.2		SW6020	06/26/14 19:45 / dck	06/20/14 16:05	ICPMS204-B_140626B	257	25019
Chromium	5	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Copper	20	mg/kg-dry		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	240	25019
Iron	4720	mg/kg-dry		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	240	25019
Lead	8	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Manganese	114	mg/kg-dry		5		SW6010B	06/25/14 00:22 / sld	06/20/14 16:05	ICP2-HE_140624B	240	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Nickel	ND	mg/kg-dry		5		SW6010B	06/25/14 19:35 / sld	06/20/14 16:05	ICP2-HE_140625A	357	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Vanadium	10	mg/kg-dry		1		SW6020	06/25/14 00:28 / dck	06/20/14 16:05	ICPMS204-B_140624B	164	25019
Zinc	74	mg/kg-dry		5		SW6010B	06/25/14 19:35 / sld	06/20/14 16:05	ICP2-HE_140625A	357	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 10:43 / sbk	06/23/14 09:48	HGCV201-H_140624A	85	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve <0.065mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-032
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	15.8	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	25	R98310
PHYSICAL CHARACTERISTICS											
Moisture	67.4	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	28	R98453
3050 EXTRACTABLE METALS											
Aluminum	8000	mg/kg		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Arsenic	14	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Barium	103	mg/kg		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 19:39 / sld	06/20/14 16:05	ICP2-HE_140625A	56	25019
Cadmium	2.5	mg/kg		0.2		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Chromium	21	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Copper	169	mg/kg		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Iron	9380	mg/kg		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Lead	68	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Manganese	515	mg/kg		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Nickel	11	mg/kg		5		SW6010B	06/25/14 19:39 / sld	06/20/14 16:05	ICP2-HE_140625A	56	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	61	25019
Vanadium	18	mg/kg		1		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	138	25019
Zinc	429	mg/kg		5		SW6010B	06/25/14 19:39 / sld	06/20/14 16:05	ICP2-HE_140625A	56	25019
METALS, TOTAL											
Mercury	0.24	mg/kg		0.10		SW7471B	06/24/14 10:46 / sbk	06/23/14 09:48	HGCV201-H_140624A	16	25024
METAL, DRY WEIGHT											
Aluminum	24600	mg/kg-dry		9		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve <0.065mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-032
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Arsenic	43	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Barium	316	mg/kg-dry		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019
Boron	8	mg/kg-dry		5		SW6010B	06/25/14 19:39 / sld	06/20/14 16:05	ICP2-HE_140625A	358	25019
Cadmium	7.7	mg/kg-dry		0.4		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Chromium	65	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Cobalt	12	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Copper	520	mg/kg-dry		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019
Iron	28800	mg/kg-dry		8		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019
Lead	209	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Manganese	1580	mg/kg-dry		5		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019
Molybdenum	7	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Nickel	34	mg/kg-dry		5		SW6010B	06/25/14 19:39 / sld	06/20/14 16:05	ICP2-HE_140625A	358	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Uranium	7	mg/kg-dry		5		SW6020	06/25/14 00:32 / dck	06/20/14 16:05	ICPMS204-B_140624B	165	25019
Vanadium	55	mg/kg-dry		2		SW6010B	06/25/14 00:26 / sld	06/20/14 16:05	ICP2-HE_140624B	241	25019
Zinc	1320	mg/kg-dry		5		SW6010B	06/25/14 19:39 / sld	06/20/14 16:05	ICP2-HE_140625A	358	25019
Mercury	0.74	mg/kg-dry		0.10		SW7471B	06/24/14 10:46 / sbk	06/23/14 09:48	HGCV201-H_140624A	86	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-033
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	31.5	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	26	R98310
PHYSICAL CHARACTERISTICS											
Moisture	49.6	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	29	R98453
3050 EXTRACTABLE METALS											
Aluminum	8240	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Arsenic	10	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Barium	119	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Cadmium	2.4	mg/kg		0.2		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Chromium	12	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Copper	142	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Iron	15100	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Lead	45	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Manganese	487	mg/kg		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Nickel	5	mg/kg		5		SW6010B	06/25/14 19:42 / sld	06/20/14 16:05	ICP2-HE_140625A	57	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	62	25019
Vanadium	38	mg/kg		1		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	139	25019
Zinc	367	mg/kg		5		SW6010B	06/25/14 19:42 / sld	06/20/14 16:05	ICP2-HE_140625A	57	25019
METALS, TOTAL											
Mercury	0.24	mg/kg		0.10		SW7471B	06/24/14 10:48 / sbk	06/23/14 09:48	HGCV201-H_140624A	17	25024
METAL, DRY WEIGHT											
Aluminum	16300	mg/kg-dry		6		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-033
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Arsenic	20	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Barium	236	mg/kg-dry		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Boron	6	mg/kg-dry		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Cadmium	4.7	mg/kg-dry		0.3		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Chromium	24	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Cobalt	8	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Copper	281	mg/kg-dry		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Iron	29900	mg/kg-dry		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Lead	90	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Manganese	966	mg/kg-dry		5		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Nickel	10	mg/kg-dry		5		SW6010B	06/25/14 19:42 / sld	06/20/14 16:05	ICP2-HE_140625A	359	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 00:37 / dck	06/20/14 16:05	ICPMS204-B_140624B	166	25019
Vanadium	76	mg/kg-dry		1		SW6010B	06/25/14 00:30 / sld	06/20/14 16:05	ICP2-HE_140624B	242	25019
Zinc	712	mg/kg-dry		5		SW6010B	06/25/14 19:42 / sld	06/20/14 16:05	ICP2-HE_140625A	359	25019
Mercury	0.47	mg/kg-dry		0.10		SW7471B	06/24/14 10:48 / sbk	06/23/14 09:48	HGCV201-H_140624A	87	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 1-2mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-034
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	8.0	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	27	R98310
PHYSICAL CHARACTERISTICS											
Moisture	40.6	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	30	R98453
3050 EXTRACTABLE METALS											
Aluminum	10700	mg/kg		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Arsenic	8	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Barium	119	mg/kg		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 19:46 / sld	06/20/14 16:05	ICP2-HE_140625A	58	25019
Cadmium	0.9	mg/kg		0.2		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Chromium	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Copper	45	mg/kg		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Iron	9080	mg/kg		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Lead	34	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Manganese	719	mg/kg		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 19:46 / sld	06/20/14 16:05	ICP2-HE_140625A	58	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	63	25019
Vanadium	13	mg/kg		1		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	140	25019
Zinc	198	mg/kg		5		SW6010B	06/25/14 19:46 / sld	06/20/14 16:05	ICP2-HE_140625A	58	25019
METALS, TOTAL											
Mercury	0.15	mg/kg		0.10		SW7471B	06/24/14 10:51 / sbk	06/23/14 09:48	HGCV201-H_140624A	18	25024
METAL, DRY WEIGHT											
Aluminum	18000	mg/kg-dry		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 1-2mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-034
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Arsenic	13	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Barium	201	mg/kg-dry		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 19:46 / sld	06/20/14 16:05	ICP2-HE_140625A	360	25019
Cadmium	1.5	mg/kg-dry		0.3		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Chromium	7	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Cobalt	6	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Copper	76	mg/kg-dry		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019
Iron	15300	mg/kg-dry		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019
Lead	58	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Manganese	1210	mg/kg-dry		5		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Nickel	ND	mg/kg-dry		5		SW6010B	06/25/14 19:46 / sld	06/20/14 16:05	ICP2-HE_140625A	360	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 00:41 / dck	06/20/14 16:05	ICPMS204-B_140624B	167	25019
Vanadium	22	mg/kg-dry		1		SW6010B	06/25/14 00:33 / sld	06/20/14 16:05	ICP2-HE_140624B	243	25019
Zinc	334	mg/kg-dry		5		SW6010B	06/25/14 19:46 / sld	06/20/14 16:05	ICP2-HE_140625A	360	25019
Mercury	0.26	mg/kg-dry		0.10		SW7471B	06/24/14 10:51 / sbk	06/23/14 09:48	HGCV201-H_140624A	88	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve <0.065mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-035
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	26.9	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	28	R98310
PHYSICAL CHARACTERISTICS											
Moisture	69.5	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	31	R98453
3050 EXTRACTABLE METALS											
Aluminum	9200	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Arsenic	15	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Barium	102	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Cadmium	1.9	mg/kg		0.2		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Chromium	21	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Copper	142	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Iron	10400	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Lead	72	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Manganese	471	mg/kg		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Nickel	10	mg/kg		5		SW6010B	06/25/14 19:49 / sld	06/20/14 16:05	ICP2-HE_140625A	59	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	64	25019
Vanadium	22	mg/kg		1		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	141	25019
Zinc	349	mg/kg		5		SW6010B	06/25/14 19:49 / sld	06/20/14 16:05	ICP2-HE_140625A	59	25019
METALS, TOTAL											
Mercury	0.33	mg/kg		0.10		SW7471B	06/24/14 10:53 / sbk	06/23/14 09:48	HGCV201-H_140624A	19	25024
METAL, DRY WEIGHT											
Aluminum	30200	mg/kg-dry		10		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve <0.065mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-035
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Arsenic	50	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Barium	337	mg/kg-dry		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Boron	15	mg/kg-dry		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Cadmium	6.2	mg/kg-dry		0.5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Chromium	68	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Cobalt	13	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Copper	465	mg/kg-dry		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Iron	34300	mg/kg-dry		10		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Lead	236	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Manganese	1550	mg/kg-dry		5		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Molybdenum	5	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Nickel	34	mg/kg-dry		5		SW6010B	06/25/14 19:49 / sld	06/20/14 16:05	ICP2-HE_140625A	361	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Uranium	7	mg/kg-dry		5		SW6020	06/25/14 00:46 / dck	06/20/14 16:05	ICPMS204-B_140624B	168	25019
Vanadium	71	mg/kg-dry		3		SW6010B	06/25/14 00:37 / sld	06/20/14 16:05	ICP2-HE_140624B	244	25019
Zinc	1150	mg/kg-dry		5		SW6010B	06/25/14 19:49 / sld	06/20/14 16:05	ICP2-HE_140625A	361	25019
Mercury	1.1	mg/kg-dry		0.10		SW7471B	06/24/14 10:53 / sbk	06/23/14 09:48	HGCV201-H_140624A	89	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-036
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	30.7	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	29	R98310
PHYSICAL CHARACTERISTICS											
Moisture	43.6	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	32	R98453
3050 EXTRACTABLE METALS											
Aluminum	7580	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Arsenic	10	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Barium	120	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Cadmium	2.1	mg/kg		0.2		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Chromium	10	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Copper	113	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Iron	12700	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Lead	51	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Manganese	458	mg/kg		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Nickel	5	mg/kg		5		SW6010B	06/25/14 19:53 / sld	06/20/14 16:05	ICP2-HE_140625A	60	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	68	25019
Vanadium	30	mg/kg		1		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	142	25019
Zinc	275	mg/kg		5		SW6010B	06/25/14 19:53 / sld	06/20/14 16:05	ICP2-HE_140625A	60	25019
METALS, TOTAL											
Mercury	0.26	mg/kg		0.10		SW7471B	06/24/14 11:00 / sbk	06/23/14 09:48	HGCV201-H_140624A	22	25024
METAL, DRY WEIGHT											
Aluminum	13400	mg/kg-dry		6		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-036
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Arsenic	17	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Barium	214	mg/kg-dry		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Boron	6	mg/kg-dry		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Cadmium	3.7	mg/kg-dry		0.3		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Chromium	18	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Cobalt	7	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Copper	201	mg/kg-dry		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Iron	22500	mg/kg-dry		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Lead	90	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Manganese	812	mg/kg-dry		5		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Nickel	9	mg/kg-dry		5		SW6010B	06/25/14 19:53 / sld	06/20/14 16:05	ICP2-HE_140625A	362	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:03 / dck	06/20/14 16:05	ICPMS204-B_140624B	169	25019
Vanadium	52	mg/kg-dry		1		SW6010B	06/25/14 00:41 / sld	06/20/14 16:05	ICP2-HE_140624B	245	25019
Zinc	488	mg/kg-dry		5		SW6010B	06/25/14 19:53 / sld	06/20/14 16:05	ICP2-HE_140625A	362	25019
Mercury	0.46	mg/kg-dry		0.10		SW7471B	06/24/14 11:00 / sbk	06/23/14 09:48	HGCV201-H_140624A	92	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 1-2mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-037
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	6.6	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	30	R98310
PHYSICAL CHARACTERISTICS											
Moisture	36.3	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	33	R98453
3050 EXTRACTABLE METALS											
Aluminum	9990	mg/kg		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	143	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Arsenic	9	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Barium	149	mg/kg		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	143	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	143	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Cadmium	1.0	mg/kg		0.2		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Chromium	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Copper	43	mg/kg		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	143	25019
Iron	8430	mg/kg		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	143	25019
Lead	24	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Manganese	420	mg/kg		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	143	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 20:30 / sld	06/20/14 16:05	ICP2-HE_140625A	70	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Vanadium	11	mg/kg		1		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	69	25019
Zinc	181	mg/kg		5		SW6010B	06/25/14 20:30 / sld	06/20/14 16:05	ICP2-HE_140625A	70	25019
METALS, TOTAL											
Mercury	0.44	mg/kg		0.10		SW7471B	06/24/14 12:55 / sbk	06/23/14 09:48	HGCV201-H_140624A	65	25024
METAL, DRY WEIGHT											
Aluminum	15700	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 1-2mm
Collection Date: 06/03/14 12:00
DateReceived: 06/04/14
Lab ID: H14060106-037
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Arsenic	14	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Barium	234	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019
Cadmium	1.5	mg/kg-dry		0.3		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Chromium	6	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Copper	68	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019
Iron	13200	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019
Lead	38	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Manganese	659	mg/kg-dry		5		SW6010B	06/25/14 00:44 / sld	06/20/14 16:05	ICP2-HE_140624B	246	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Nickel	ND	mg/kg-dry		5		SW6010B	06/25/14 20:30 / sld	06/20/14 16:05	ICP2-HE_140625A	367	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Vanadium	17	mg/kg-dry		1		SW6020	06/25/14 01:08 / dck	06/20/14 16:05	ICPMS204-B_140624B	170	25019
Zinc	283	mg/kg-dry		5		SW6010B	06/25/14 20:30 / sld	06/20/14 16:05	ICP2-HE_140625A	367	25019
Mercury	0.69	mg/kg-dry		0.10		SW7471B	06/24/14 12:55 / sbk	06/23/14 09:48	HGCV201-H_140624A	135	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Lab ID: H14060106-038
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 10:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	8.8	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	31	R98310
PHYSICAL CHARACTERISTICS											
Moisture	73.6	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	34	R98453
3050 EXTRACTABLE METALS											
Aluminum	6050	mg/kg		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Arsenic	10	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Barium	68	mg/kg		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Cadmium	1.8	mg/kg		0.2		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Chromium	46	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Copper	112	mg/kg		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Iron	6350	mg/kg		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Lead	41	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Manganese	530	mg/kg		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Nickel	21	mg/kg		5		SW6010B	06/25/14 20:34 / sld	06/20/14 16:05	ICP2-HE_140625A	71	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	70	25019
Vanadium	16	mg/kg		1		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	144	25019
Zinc	367	mg/kg		5		SW6010B	06/25/14 20:34 / sld	06/20/14 16:05	ICP2-HE_140625A	71	25019
METALS, TOTAL											
Mercury	0.14	mg/kg		0.10		SW7471B	06/24/14 11:05 / sbk	06/23/14 09:48	HGCV201-H_140624A	24	25024
METAL, DRY WEIGHT											
Aluminum	22900	mg/kg-dry		10		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Collection Date: 06/03/14 10:00
DateReceived: 06/04/14
Lab ID: H14060106-038
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Arsenic	38	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Barium	258	mg/kg-dry		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Boron	12	mg/kg-dry		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Cadmium	6.8	mg/kg-dry		0.6		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Chromium	175	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Cobalt	12	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Copper	425	mg/kg-dry		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Iron	24000	mg/kg-dry		10		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Lead	155	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Manganese	2010	mg/kg-dry		5		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Molybdenum	7	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Nickel	80	mg/kg-dry		5		SW6010B	06/25/14 20:34 / sld	06/20/14 16:05	ICP2-HE_140625A	368	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Uranium	7	mg/kg-dry		5		SW6020	06/25/14 01:12 / dck	06/20/14 16:05	ICPMS204-B_140624B	171	25019
Vanadium	62	mg/kg-dry		3		SW6010B	06/25/14 00:48 / sld	06/20/14 16:05	ICP2-HE_140624B	247	25019
Zinc	1390	mg/kg-dry		5		SW6010B	06/25/14 20:34 / sld	06/20/14 16:05	ICP2-HE_140625A	368	25019
Mercury	0.55	mg/kg-dry		0.10		SW7471B	06/24/14 11:05 / sbk	06/23/14 09:48	HGCV201-H_140624A	94	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 10:00
DateReceived: 06/04/14
Lab ID: H14060106-039
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	18.5	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	32	R98310
PHYSICAL CHARACTERISTICS											
Moisture	23.7	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	36	R98453
3050 EXTRACTABLE METALS											
Aluminum	3970	mg/kg		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Barium	74	mg/kg		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Cadmium	0.8	mg/kg		0.2		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Chromium	19	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Copper	33	mg/kg		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Iron	25800	mg/kg		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Lead	12	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Manganese	249	mg/kg		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Nickel	6	mg/kg		5		SW6010B	06/25/14 20:38 / sld	06/20/14 16:05	ICP2-HE_140625A	72	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	71	25019
Vanadium	85	mg/kg		1		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	147	25019
Zinc	117	mg/kg		5		SW6010B	06/25/14 20:38 / sld	06/20/14 16:05	ICP2-HE_140625A	72	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:07 / sbk	06/23/14 09:48	HGCV201-H_140624A	25	25024
METAL, DRY WEIGHT											
Aluminum	5210	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 10:00
DateReceived: 06/04/14
Lab ID: H14060106-039
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Arsenic	6	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Barium	97	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Cadmium	1.0	mg/kg-dry		0.2		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Chromium	25	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Copper	44	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Iron	33800	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Lead	16	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Manganese	327	mg/kg-dry		5		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Nickel	7	mg/kg-dry		5		SW6010B	06/25/14 20:38 / sld	06/20/14 16:05	ICP2-HE_140625A	369	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:17 / dck	06/20/14 16:05	ICPMS204-B_140624B	172	25019
Vanadium	111	mg/kg-dry		1		SW6010B	06/25/14 00:59 / sld	06/20/14 16:05	ICP2-HE_140624B	250	25019
Zinc	154	mg/kg-dry		5		SW6010B	06/25/14 20:38 / sld	06/20/14 16:05	ICP2-HE_140625A	369	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:07 / sbk	06/23/14 09:48	HGCV201-H_140624A	95	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14060106-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 10:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	11.4	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	33	R98310
PHYSICAL CHARACTERISTICS											
Moisture	15.5	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	37	R98453
3050 EXTRACTABLE METALS											
Aluminum	2640	mg/kg		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	148	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Barium	38	mg/kg		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	148	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	148	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Cadmium	0.3	mg/kg		0.2		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Chromium	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Copper	8	mg/kg		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	148	25019
Iron	3580	mg/kg		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	148	25019
Lead	6	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Manganese	102	mg/kg		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	148	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 20:41 / sld	06/20/14 16:05	ICP2-HE_140625A	73	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Vanadium	7	mg/kg		1		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	72	25019
Zinc	46	mg/kg		5		SW6010B	06/25/14 20:41 / sld	06/20/14 16:05	ICP2-HE_140625A	73	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:17 / sbk	06/23/14 09:48	HGCV201-H_140624A	29	25024
METAL, DRY WEIGHT											
Aluminum	3120	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14060106-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 10:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Arsenic	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Barium	45	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019
Cadmium	0.4	mg/kg-dry		0.2		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Chromium	6	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Copper	9	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019
Iron	4240	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019
Lead	8	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Manganese	120	mg/kg-dry		5		SW6010B	06/25/14 01:03 / sld	06/20/14 16:05	ICP2-HE_140624B	251	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Nickel	ND	mg/kg-dry		5		SW6010B	06/25/14 20:41 / sld	06/20/14 16:05	ICP2-HE_140625A	370	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Vanadium	9	mg/kg-dry		1		SW6020	06/25/14 01:21 / dck	06/20/14 16:05	ICPMS204-B_140624B	173	25019
Zinc	54	mg/kg-dry		5		SW6010B	06/25/14 20:41 / sld	06/20/14 16:05	ICP2-HE_140625A	370	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:17 / sbk	06/23/14 09:48	HGCV201-H_140624A	99	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Lab ID: H14060106-041
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	5.4	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	34	R98310
PHYSICAL CHARACTERISTICS											
Moisture	79.5	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	38	R98453
3050 EXTRACTABLE METALS											
Aluminum	8120	mg/kg		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Arsenic	12	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Barium	79	mg/kg		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Boron	5	mg/kg		5		SW6010B	06/25/14 20:45 / sld	06/20/14 16:05	ICP2-HE_140625A	74	25019
Cadmium	1.9	mg/kg		0.2		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Chromium	68	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Copper	93	mg/kg		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Iron	7280	mg/kg		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Lead	54	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Manganese	329	mg/kg		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Nickel	37	mg/kg		5		SW6010B	06/25/14 20:45 / sld	06/20/14 16:05	ICP2-HE_140625A	74	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	73	25019
Vanadium	18	mg/kg		1		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	149	25019
Zinc	401	mg/kg		5		SW6010B	06/25/14 20:45 / sld	06/20/14 16:05	ICP2-HE_140625A	74	25019
METALS, TOTAL											
Mercury	0.16	mg/kg		0.10		SW7471B	06/24/14 11:19 / sbk	06/23/14 09:48	HGCV201-H_140624A	30	25024
METAL, DRY WEIGHT											
Aluminum	39700	mg/kg-dry		20		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Lab ID: H14060106-041
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Arsenic	57	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Barium	389	mg/kg-dry		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019
Boron	25	mg/kg-dry		5		SW6010B	06/25/14 20:45 / sld	06/20/14 16:05	ICP2-HE_140625A	371	25019
Cadmium	9.3	mg/kg-dry		0.7		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Chromium	333	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Cobalt	17	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Copper	456	mg/kg-dry		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019
Iron	35600	mg/kg-dry		10		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019
Lead	265	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Manganese	1610	mg/kg-dry		5		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019
Molybdenum	12	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Nickel	180	mg/kg-dry		5		SW6010B	06/25/14 20:45 / sld	06/20/14 16:05	ICP2-HE_140625A	371	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Uranium	22	mg/kg-dry		5		SW6020	06/25/14 01:25 / dck	06/20/14 16:05	ICPMS204-B_140624B	174	25019
Vanadium	90	mg/kg-dry		3		SW6010B	06/25/14 01:07 / sld	06/20/14 16:05	ICP2-HE_140624B	252	25019
Zinc	1960	mg/kg-dry		5		SW6010B	06/25/14 20:45 / sld	06/20/14 16:05	ICP2-HE_140625A	371	25019
Mercury	0.77	mg/kg-dry		0.10		SW7471B	06/24/14 11:19 / sbk	06/23/14 09:48	HGCV201-H_140624A	100	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Lab ID: H14060106-042
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	41.7	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	35	R98310
PHYSICAL CHARACTERISTICS											
Moisture	29.4	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	39	R98453
3050 EXTRACTABLE METALS											
Aluminum	3870	mg/kg		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Barium	89	mg/kg		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Cadmium	0.6	mg/kg		0.2		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Chromium	11	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Copper	21	mg/kg		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Iron	8950	mg/kg		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Lead	11	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Manganese	109	mg/kg		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 20:49 / sld	06/20/14 16:05	ICP2-HE_140625A	75	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	74	25019
Vanadium	26	mg/kg		1		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	150	25019
Zinc	87	mg/kg		5		SW6010B	06/25/14 20:49 / sld	06/20/14 16:05	ICP2-HE_140625A	75	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:22 / sbk	06/23/14 09:48	HGCV201-H_140624A	31	25024
METAL, DRY WEIGHT											
Aluminum	5480	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Lab ID: H14060106-042
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Arsenic	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Barium	125	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Cadmium	0.9	mg/kg-dry		0.2		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Chromium	15	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Copper	29	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Iron	12700	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Lead	16	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Manganese	154	mg/kg-dry		5		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Nickel	6	mg/kg-dry		5		SW6010B	06/25/14 20:49 / sld	06/20/14 16:05	ICP2-HE_140625A	372	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:30 / dck	06/20/14 16:05	ICPMS204-B_140624B	175	25019
Vanadium	37	mg/kg-dry		1		SW6010B	06/25/14 01:10 / sld	06/20/14 16:05	ICP2-HE_140624B	253	25019
Zinc	123	mg/kg-dry		5		SW6010B	06/25/14 20:49 / sld	06/20/14 16:05	ICP2-HE_140625A	372	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:22 / sbk	06/23/14 09:48	HGCV201-H_140624A	101	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14060106-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	19.0	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	36	R98310
PHYSICAL CHARACTERISTICS											
Moisture	24.5	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	40	R98453
3050 EXTRACTABLE METALS											
Aluminum	4380	mg/kg		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Barium	91	mg/kg		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Cadmium	0.4	mg/kg		0.2		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Chromium	11	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Copper	18	mg/kg		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Iron	5850	mg/kg		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Lead	14	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Manganese	168	mg/kg		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Nickel	6	mg/kg		5		SW6010B	06/25/14 20:53 / sld	06/20/14 16:05	ICP2-HE_140625A	76	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	75	25019
Vanadium	14	mg/kg		1		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	151	25019
Zinc	70	mg/kg		5		SW6010B	06/25/14 20:53 / sld	06/20/14 16:05	ICP2-HE_140625A	76	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:24 / sbk	06/23/14 09:48	HGCV201-H_140624A	32	25024
METAL, DRY WEIGHT											
Aluminum	5790	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14060106-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/03/14 09:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Arsenic	6	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Barium	121	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Cadmium	0.5	mg/kg-dry		0.2		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Chromium	15	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Copper	24	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Iron	7740	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Lead	18	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Manganese	222	mg/kg-dry		5		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Nickel	8	mg/kg-dry		5		SW6010B	06/25/14 20:53 / sld	06/20/14 16:05	ICP2-HE_140625A	373	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:34 / dck	06/20/14 16:05	ICPMS204-B_140624B	176	25019
Vanadium	18	mg/kg-dry		1		SW6010B	06/25/14 01:14 / sld	06/20/14 16:05	ICP2-HE_140624B	254	25019
Zinc	92	mg/kg-dry		5		SW6010B	06/25/14 20:53 / sld	06/20/14 16:05	ICP2-HE_140625A	373	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:24 / sbk	06/23/14 09:48	HGCV201-H_140624A	102	25024

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14060106-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	9.8	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	37	R98310
PHYSICAL CHARACTERISTICS											
Moisture	65.6	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	41	R98453
3050 EXTRACTABLE METALS											
Aluminum	8140	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Arsenic	9	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Barium	108	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Cadmium	2.5	mg/kg		0.2		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Chromium	49	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Copper	70	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Iron	7870	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Lead	34	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Manganese	438	mg/kg		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Nickel	23	mg/kg		5		SW6010B	06/25/14 20:56 / sld	06/20/14 16:05	ICP2-HE_140625A	77	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	76	25019
Vanadium	21	mg/kg		1		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	152	25019
Zinc	377	mg/kg		5		SW6010B	06/25/14 20:56 / sld	06/20/14 16:05	ICP2-HE_140625A	77	25019
METALS, TOTAL											
Mercury	0.11	mg/kg		0.10		SW7471B	06/24/14 11:38 / sbk	06/23/14 09:49	HGCV201-H_140624A	38	25025
METAL, DRY WEIGHT											
Aluminum	23700	mg/kg-dry		10		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Lab ID: H14060106-044
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Arsenic	26	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Barium	315	mg/kg-dry		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Boron	11	mg/kg-dry		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Cadmium	7.3	mg/kg-dry		0.5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Chromium	143	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Cobalt	11	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Copper	205	mg/kg-dry		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Iron	22900	mg/kg-dry		8		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Lead	100	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Manganese	1270	mg/kg-dry		5		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Nickel	67	mg/kg-dry		5		SW6010B	06/25/14 20:56 / sld	06/20/14 16:05	ICP2-HE_140625A	374	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:39 / dck	06/20/14 16:05	ICPMS204-B_140624B	177	25019
Vanadium	62	mg/kg-dry		2		SW6010B	06/25/14 01:18 / sld	06/20/14 16:05	ICP2-HE_140624B	255	25019
Zinc	1100	mg/kg-dry		5		SW6010B	06/25/14 20:56 / sld	06/20/14 16:05	ICP2-HE_140625A	374	25019
Mercury	0.33	mg/kg-dry		0.10		SW7471B	06/24/14 11:38 / sbk	06/23/14 09:49	HGCV201-H_140624A	108	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14060106-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	27.2	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	38	R98310
PHYSICAL CHARACTERISTICS											
Moisture	28.2	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	42	R98453
3050 EXTRACTABLE METALS											
Aluminum	4390	mg/kg		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Barium	102	mg/kg		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Boron	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Cadmium	0.5	mg/kg		0.2		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Chromium	9	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Copper	18	mg/kg		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Iron	8780	mg/kg		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Lead	10	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Manganese	174	mg/kg		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Nickel	ND	mg/kg		5		SW6010B	06/25/14 21:00 / sld	06/20/14 16:05	ICP2-HE_140625A	78	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	77	25019
Vanadium	24	mg/kg		1		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	153	25019
Zinc	87	mg/kg		5		SW6010B	06/25/14 21:00 / sld	06/20/14 16:05	ICP2-HE_140625A	78	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:41 / sbk	06/23/14 09:49	HGCV201-H_140624A	39	25025
METAL, DRY WEIGHT											
Aluminum	6110	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14060106-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Arsenic	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Barium	142	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Cadmium	0.7	mg/kg-dry		0.2		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Chromium	12	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Copper	25	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Iron	12200	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Lead	13	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Manganese	242	mg/kg-dry		5		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Nickel	7	mg/kg-dry		5		SW6010B	06/25/14 21:00 / sld	06/20/14 16:05	ICP2-HE_140625A	375	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 01:43 / dck	06/20/14 16:05	ICPMS204-B_140624B	178	25019
Vanadium	33	mg/kg-dry		1		SW6010B	06/25/14 01:21 / sld	06/20/14 16:05	ICP2-HE_140624B	256	25019
Zinc	121	mg/kg-dry		5		SW6010B	06/25/14 21:00 / sld	06/20/14 16:05	ICP2-HE_140625A	375	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:41 / sbk	06/23/14 09:49	HGCV201-H_140624A	109	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14060106-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	22.3	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	39	R98310
PHYSICAL CHARACTERISTICS											
Moisture	15.6	wt%		0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	43	R98453
3050 EXTRACTABLE METALS											
Aluminum	3780	mg/kg		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Antimony	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Arsenic	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Barium	84	mg/kg		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Boron	ND	mg/kg		5		SW6010B	06/25/14 21:04 / sld	06/20/14 16:05	ICP2-HE_140625A	79	25019
Cadmium	0.4	mg/kg		0.2		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Chromium	10	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Cobalt	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Copper	12	mg/kg		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Iron	6040	mg/kg		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Lead	7	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Manganese	192	mg/kg		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Nickel	6	mg/kg		5		SW6010B	06/25/14 21:04 / sld	06/20/14 16:05	ICP2-HE_140625A	79	25019
Selenium	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Silver	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Uranium	ND	mg/kg		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	81	25019
Vanadium	12	mg/kg		1		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	154	25019
Zinc	116	mg/kg		5		SW6010B	06/25/14 21:04 / sld	06/20/14 16:05	ICP2-HE_140625A	79	25019
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:43 / sbk	06/23/14 09:49	HGCV201-H_140624A	40	25025
METAL, DRY WEIGHT											
Aluminum	4480	mg/kg-dry		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14060106-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 18:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Arsenic	6	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Barium	99	mg/kg-dry		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019
Boron	ND	mg/kg-dry		5		SW6010B	06/25/14 21:04 / sld	06/20/14 16:05	ICP2-HE_140625A	376	25019
Cadmium	0.4	mg/kg-dry		0.2		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Chromium	12	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Copper	14	mg/kg-dry		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019
Iron	7160	mg/kg-dry		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019
Lead	9	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Manganese	228	mg/kg-dry		5		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Nickel	7	mg/kg-dry		5		SW6010B	06/25/14 21:04 / sld	06/20/14 16:05	ICP2-HE_140625A	376	25019
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 02:01 / dck	06/20/14 16:05	ICPMS204-B_140624B	179	25019
Vanadium	14	mg/kg-dry		1		SW6010B	06/25/14 01:25 / sld	06/20/14 16:05	ICP2-HE_140624B	257	25019
Zinc	138	mg/kg-dry		5		SW6010B	06/25/14 21:04 / sld	06/20/14 16:05	ICP2-HE_140625A	376	25019
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:43 / sbk	06/23/14 09:49	HGCV201-H_140624A	110	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Lab ID: H14060106-047
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	8.6	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	40	R98310
PHYSICAL CHARACTERISTICS											
Moisture	75.1	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	44	R98453
3050 EXTRACTABLE METALS											
Aluminum	7860	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Arsenic	13	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Barium	108	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Cadmium	1.8	mg/kg		0.2		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Chromium	47	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Copper	129	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Iron	8190	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Lead	75	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Manganese	479	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Nickel	24	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	83	25047
Vanadium	19	mg/kg		1		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
Zinc	435	mg/kg		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	119	25047
METALS, TOTAL											
Mercury	0.16	mg/kg		0.10		SW7471B	06/24/14 11:53 / sbk	06/23/14 09:49	HGCV201-H_140624A	44	25025
METAL, DRY WEIGHT											
Aluminum	31600	mg/kg-dry		10		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Lab ID: H14060106-047
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Arsenic	54	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Barium	432	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Boron	ND	mg/kg-dry		20		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Cadmium	7.0	mg/kg-dry		0.2		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Chromium	188	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Cobalt	15	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Copper	518	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Iron	32900	mg/kg-dry		10		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Lead	302	mg/kg-dry		10		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Manganese	1930	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Molybdenum	8	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Nickel	96	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Uranium	6	mg/kg-dry		5		SW6020	06/25/14 16:55 / dck	06/24/14 08:16	ICPMS204-B_140625A	229	25047
Vanadium	76	mg/kg-dry		3		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Zinc	1750	mg/kg-dry		5		SW6010B	06/25/14 23:31 / sld	06/24/14 08:16	ICP2-HE_140625A	393	25047
Mercury	0.64	mg/kg-dry		0.10		SW7471B	06/24/14 11:53 / sbk	06/23/14 09:49	HGCV201-H_140624A	114	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14060106-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	32.3	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	41	R98310
PHYSICAL CHARACTERISTICS											
Moisture	28.7	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	45	R98453
3050 EXTRACTABLE METALS											
Aluminum	3860	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Arsenic	6	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Barium	100	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Cadmium	0.6	mg/kg		0.2		SW6020	06/26/14 20:49 / dck	06/24/14 08:17	ICPMS204-B_140626B	78	25048
Chromium	8	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Copper	38	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Iron	8390	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Lead	16	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Manganese	241	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	145	25048
Vanadium	21	mg/kg		1		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
Zinc	129	mg/kg		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	145	25048
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:55 / sbk	06/23/14 09:49	HGCV201-H_140624A	45	25025
METAL, DRY WEIGHT											
Aluminum	5410	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14060106-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Arsenic	8	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Barium	141	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Cadmium	0.8	mg/kg-dry		0.2		SW6020	06/26/14 20:49 / dck	06/24/14 08:17	ICPMS204-B_140626B	250	25048
Chromium	11	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Copper	53	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Iron	11800	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Lead	23	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Manganese	338	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Nickel	6	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:44 / dck	06/24/14 08:17	ICPMS204-B_140625A	238	25048
Vanadium	30	mg/kg-dry		1		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Zinc	182	mg/kg-dry		5		SW6010B	06/26/14 01:07 / sld	06/24/14 08:17	ICP2-HE_140625A	411	25048
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:55 / sbk	06/23/14 09:49	HGCV201-H_140624A	115	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14060106-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	10.6	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	42	R98310
PHYSICAL CHARACTERISTICS											
Moisture	21.9	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	47	R98453
3050 EXTRACTABLE METALS											
Aluminum	2970	mg/kg		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	166	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Arsenic	ND	mg/kg		5		SW6010B	07/08/14 16:38 / sld	06/30/14 08:18	ICP2-HE_140708B	99	25136
Barium	80	mg/kg		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	166	25049
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	166	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Cadmium	0.4	mg/kg		0.2		SW6020	06/26/14 21:16 / dck	06/24/14 08:17	ICPMS204-B_140626B	84	25049
Chromium	9	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Copper	31	mg/kg		5		SW6010B	07/02/14 01:13 / sld	06/30/14 08:18	ICP2-HE_140701B	185	25136
Iron	5160	mg/kg		5		SW6010B	07/08/14 16:38 / sld	06/30/14 08:18	ICP2-HE_140708B	99	25136
Lead	15	mg/kg		5		SW6010B	07/08/14 16:38 / sld	06/30/14 08:18	ICP2-HE_140708B	99	25136
Manganese	155	mg/kg		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	166	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	166	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	166	25049
Vanadium	10	mg/kg		1		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	166	25049
Zinc	89	mg/kg		5		SW6010B	07/03/14 01:44 / sld	06/30/14 08:18	ICP2-HE_140702A	197	25136
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 11:57 / sbk	06/23/14 09:49	HGCV201-H_140624A	46	25025
METAL, DRY WEIGHT											
Aluminum	3810	mg/kg-dry		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	429	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14060106-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 15:45
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Arsenic	5	mg/kg-dry		5		SW6010B	07/08/14 16:38 / sld	06/30/14 08:18	ICP2-HE_140708B	: 387	25136
Barium	102	mg/kg-dry		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	: 429	25049
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	: 429	25049
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Cadmium	0.5	mg/kg-dry		0.2		SW6020	06/26/14 21:16 / dck	06/24/14 08:17	ICPMS204-B_140626B	: 252	25049
Chromium	11	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Copper	40	mg/kg-dry		5		SW6010B	07/02/14 01:13 / sld	06/30/14 08:18	ICP2-HE_140701B	: 222	25136
Iron	6610	mg/kg-dry		5		SW6010B	07/08/14 16:38 / sld	06/30/14 08:18	ICP2-HE_140708B	: 387	25136
Lead	19	mg/kg-dry		5		SW6010B	07/08/14 16:38 / sld	06/30/14 08:18	ICP2-HE_140708B	: 387	25136
Manganese	198	mg/kg-dry		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	: 429	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Nickel	6	mg/kg-dry		5		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	: 429	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:17 / dck	06/24/14 08:17	ICPMS204-B_140625A	: 248	25049
Vanadium	12	mg/kg-dry		1		SW6010B	06/26/14 02:24 / sld	06/24/14 08:17	ICP2-HE_140625A	: 429	25049
Zinc	114	mg/kg-dry		5		SW6010B	07/03/14 01:44 / sld	06/30/14 08:18	ICP2-HE_140702A	: 631	25136
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 11:57 / sbk	06/23/14 09:49	HGCV201-H_140624A	: 116	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14060106-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	9.3	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	43	R98310
PHYSICAL CHARACTERISTICS											
Moisture	68.2	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	48	R98453
3050 EXTRACTABLE METALS											
Aluminum	7360	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Arsenic	32	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Barium	114	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Cadmium	2.9	mg/kg		0.2		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Chromium	55	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Copper	338	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Iron	8900	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Lead	119	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Manganese	820	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Nickel	28	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	84	25047
Vanadium	20	mg/kg		1		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
Zinc	674	mg/kg		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	120	25047
METALS, TOTAL											
Mercury	0.51	mg/kg		0.10		SW7471B	06/24/14 12:58 / sbk	06/23/14 09:49	HGCV201-H_140624A	66	25025
METAL, DRY WEIGHT											
Aluminum	23200	mg/kg-dry		10		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Lab ID: H14060106-050
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Arsenic	102	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Barium	360	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Cadmium	9.0	mg/kg-dry		0.2		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Chromium	175	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Cobalt	14	mg/kg-dry		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Copper	1060	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Iron	28000	mg/kg-dry		9		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Lead	374	mg/kg-dry		10		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Manganese	2580	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Molybdenum	6	mg/kg-dry		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Nickel	89	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 16:59 / dck	06/24/14 08:16	ICPMS204-B_140625A	230	25047
Vanadium	63	mg/kg-dry		2		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Zinc	2120	mg/kg-dry		5		SW6010B	06/25/14 23:34 / sld	06/24/14 08:16	ICP2-HE_140625A	394	25047
Mercury	1.6	mg/kg-dry		0.10		SW7471B	06/24/14 12:58 / sbk	06/23/14 09:49	HGCV201-H_140624A	136	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Lab ID: H14060106-051
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	39.3	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	44	R98310
PHYSICAL CHARACTERISTICS											
Moisture	30.2	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	49	R98453
3050 EXTRACTABLE METALS											
Aluminum	3500	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Arsenic	38	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Barium	90	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Cadmium	2.8	mg/kg		0.2		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Chromium	14	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Copper	206	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Iron	21000	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Lead	68	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Manganese	575	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Nickel	6	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	146	25048
Vanadium	54	mg/kg		1		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
Zinc	981	mg/kg		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	146	25048
METALS, TOTAL											
Mercury	0.31	mg/kg		0.10		SW7471B	06/24/14 12:02 / sbk	06/23/14 09:49	HGCV201-H_140624A	48	25025
METAL, DRY WEIGHT											
Aluminum	5010	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Lab ID: H14060106-051
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Arsenic	54	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Barium	128	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Cadmium	4.0	mg/kg-dry		0.2		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Chromium	20	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Cobalt	5	mg/kg-dry		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Copper	295	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Iron	30100	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Lead	97	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Manganese	824	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Nickel	9	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	239	25048
Vanadium	77	mg/kg-dry		1		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Zinc	1410	mg/kg-dry		5		SW6010B	06/26/14 01:10 / sld	06/24/14 08:17	ICP2-HE_140625A	412	25048
Mercury	0.45	mg/kg-dry		0.10		SW7471B	06/24/14 12:02 / sbk	06/23/14 09:49	HGCV201-H_140624A	118	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14060106-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	18.3	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	45	R98310
PHYSICAL CHARACTERISTICS											
Moisture	17.8	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	50	R98453
3050 EXTRACTABLE METALS											
Aluminum	3310	mg/kg		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	167	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Arsenic	76	mg/kg		5		SW6010B	07/08/14 17:48 / sld	06/30/14 08:16	ICP2-HE_140708B	118	25135
Barium	69	mg/kg		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	167	25049
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	167	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Cadmium	0.7	mg/kg		0.2		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Chromium	11	mg/kg		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	167	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Copper	257	mg/kg		5		SW6010B	07/02/14 01:17 / sld	06/30/14 08:18	ICP2-HE_140701B	186	25136
Iron	11100	mg/kg		5		SW6010B	07/08/14 17:48 / sld	06/30/14 08:16	ICP2-HE_140708B	118	25135
Lead	91	mg/kg		5		SW6010B	07/08/14 16:42 / sld	06/30/14 08:18	ICP2-HE_140708B	100	25136
Manganese	335	mg/kg		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	167	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Nickel	6	mg/kg		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	167	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	167	25049
Vanadium	18	mg/kg		1		SW6010B	07/02/14 01:17 / sld	06/30/14 08:18	ICP2-HE_140701B	186	25136
Zinc	316	mg/kg		5		SW6010B	07/08/14 17:48 / sld	06/30/14 08:16	ICP2-HE_140708B	118	25135
METALS, TOTAL											
Mercury	0.14	mg/kg		0.10		SW7471B	06/24/14 12:05 / sbk	06/23/14 09:49	HGCV201-H_140624A	49	25025
METAL, DRY WEIGHT											
Aluminum	4020	mg/kg-dry		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	430	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14060106-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 14:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Arsenic	93	mg/kg-dry		5		SW6010B	07/08/14 17:48 / sld	06/30/14 08:16	ICP2-HE_140708B	404	25135
Barium	84	mg/kg-dry		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	430	25049
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	430	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Cadmium	0.8	mg/kg-dry		0.2		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Chromium	13	mg/kg-dry		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	430	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Copper	313	mg/kg-dry		5		SW6010B	07/02/14 01:17 / sld	06/30/14 08:18	ICP2-HE_140701B	223	25136
Iron	13500	mg/kg-dry		5		SW6010B	07/08/14 17:48 / sld	06/30/14 08:16	ICP2-HE_140708B	404	25135
Lead	111	mg/kg-dry		5		SW6010B	07/08/14 16:42 / sld	06/30/14 08:18	ICP2-HE_140708B	388	25136
Manganese	407	mg/kg-dry		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	430	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Nickel	8	mg/kg-dry		5		SW6010B	06/26/14 02:28 / sld	06/24/14 08:17	ICP2-HE_140625A	430	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:21 / dck	06/24/14 08:17	ICPMS204-B_140625A	249	25049
Vanadium	22	mg/kg-dry		1		SW6010B	07/02/14 01:17 / sld	06/30/14 08:18	ICP2-HE_140701B	223	25136
Zinc	384	mg/kg-dry		5		SW6010B	07/08/14 17:48 / sld	06/30/14 08:16	ICP2-HE_140708B	404	25135
Mercury	0.18	mg/kg-dry		0.10		SW7471B	06/24/14 12:05 / sbk	06/23/14 09:49	HGCV201-H_140624A	119	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14060106-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	6.6	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	46	R98310
PHYSICAL CHARACTERISTICS											
Moisture	56.0	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	51	R98453
3050 EXTRACTABLE METALS											
Aluminum	11500	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Arsenic	48	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Barium	168	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Cadmium	3.0	mg/kg		0.2		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Chromium	14	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Copper	401	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Iron	13600	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Lead	148	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Manganese	618	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Nickel	10	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	88	25047
Vanadium	29	mg/kg		1		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
Zinc	608	mg/kg		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	121	25047
METALS, TOTAL											
Mercury	0.75	mg/kg		0.10		SW7471B	06/24/14 13:00 / sbk	06/23/14 09:49	HGCV201-H_140624A	67	25025
METAL, DRY WEIGHT											
Aluminum	26200	mg/kg-dry		8		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14060106-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Arsenic	109	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Barium	382	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Cadmium	6.7	mg/kg-dry		0.2		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Chromium	33	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Cobalt	10	mg/kg-dry		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Copper	910	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Iron	30800	mg/kg-dry		7		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Lead	336	mg/kg-dry		8		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Manganese	1400	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Nickel	23	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Silver	5	mg/kg-dry		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Uranium	5	mg/kg-dry		5		SW6020	06/25/14 17:17 / dck	06/24/14 08:16	ICPMS204-B_140625A	231	25047
Vanadium	66	mg/kg-dry		2		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Zinc	1380	mg/kg-dry		5		SW6010B	06/25/14 23:38 / sld	06/24/14 08:16	ICP2-HE_140625A	395	25047
Mercury	1.7	mg/kg-dry		0.11		SW7471B	06/24/14 13:00 / sbk	06/23/14 09:49	HGCV201-H_140624A	137	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Lab ID: H14060106-054
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	56.5	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	47	R98310
PHYSICAL CHARACTERISTICS											
Moisture	25.7	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	52	R98453
3050 EXTRACTABLE METALS											
Aluminum	5800	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Arsenic	34	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Barium	106	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Cadmium	0.8	mg/kg		0.2		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Chromium	11	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Copper	93	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Iron	13200	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Lead	59	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Manganese	300	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Nickel	7	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	147	25048
Vanadium	32	mg/kg		1		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
Zinc	265	mg/kg		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	149	25048
METALS, TOTAL											
Mercury	0.16	mg/kg		0.10		SW7471B	06/26/14 13:56 / sbk	06/24/14 11:12	HGCV201-H_140626A	7	25053
METAL, DRY WEIGHT											
Aluminum	7810	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Lab ID: H14060106-054
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Arsenic	45	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Barium	142	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Cadmium	1.1	mg/kg-dry		0.2		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Chromium	15	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Copper	126	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Iron	17800	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Lead	79	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Manganese	404	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Nickel	9	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:53 / dck	06/24/14 08:17	ICPMS204-B_140625A	240	25048
Vanadium	43	mg/kg-dry		1		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Zinc	357	mg/kg-dry		5		SW6010B	06/26/14 01:22 / sld	06/24/14 08:17	ICP2-HE_140625A	415	25048
Mercury	0.22	mg/kg-dry		0.10		SW7471B	06/26/14 13:56 / sbk	06/24/14 11:12	HGCV201-H_140626A	40	25053

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14060106-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	14.4	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	48	R98310
PHYSICAL CHARACTERISTICS											
Moisture	23.4	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	53	R98453
3050 EXTRACTABLE METALS											
Aluminum	6020	mg/kg		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Arsenic	26	mg/kg		5		SW6010B	07/08/14 17:52 / sld	06/30/14 08:16	ICP2-HE_140708B	119	25135
Barium	109	mg/kg		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Cadmium	0.3	mg/kg		0.2		SW6020	06/26/14 21:20 / dck	06/24/14 08:17	ICPMS204-B_140626B	85	25049
Chromium	11	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Copper	62	mg/kg		5		SW6010B	07/08/14 17:52 / sld	06/30/14 08:16	ICP2-HE_140708B	119	25135
Iron	11300	mg/kg		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Lead	25	mg/kg		5		SW6010B	07/08/14 17:52 / sld	06/30/14 08:16	ICP2-HE_140708B	119	25135
Manganese	238	mg/kg		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Nickel	6	mg/kg		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	168	25049
Vanadium	18	mg/kg		1		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	168	25049
Zinc	154	mg/kg		5		SW6010B	07/08/14 14:06 / sld	06/30/14 08:16	ICP2-HE_140708B	58	25135
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 12:14 / sbk	06/23/14 09:49	HGCV201-H_140624A	53	25025
METAL, DRY WEIGHT											
Aluminum	7860	mg/kg-dry		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14060106-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 12:30 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Arsenic	34	mg/kg-dry		5		SW6010B	07/08/14 17:52 / sld	06/30/14 08:16	ICP2-HE_140708B	405	25135
Barium	143	mg/kg-dry		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Cadmium	0.4	mg/kg-dry		0.2		SW6020	06/26/14 21:20 / dck	06/24/14 08:17	ICPMS204-B_140626B	253	25049
Chromium	15	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Copper	81	mg/kg-dry		5		SW6010B	07/08/14 17:52 / sld	06/30/14 08:16	ICP2-HE_140708B	405	25135
Iron	14700	mg/kg-dry		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049
Lead	32	mg/kg-dry		5		SW6010B	07/08/14 17:52 / sld	06/30/14 08:16	ICP2-HE_140708B	405	25135
Manganese	310	mg/kg-dry		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Nickel	8	mg/kg-dry		5		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:26 / dck	06/24/14 08:17	ICPMS204-B_140625A	250	25049
Vanadium	23	mg/kg-dry		1		SW6010B	06/26/14 02:32 / sld	06/24/14 08:17	ICP2-HE_140625A	431	25049
Zinc	201	mg/kg-dry		5		SW6010B	07/08/14 14:06 / sld	06/30/14 08:16	ICP2-HE_140708B	362	25135
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 12:14 / sbk	06/23/14 09:49	HGCV201-H_140624A	123	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14060106-056
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	7.4	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	49	R98310
PHYSICAL CHARACTERISTICS											
Moisture	58.7	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	54	R98453
3050 EXTRACTABLE METALS											
Aluminum	17700	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Arsenic	32	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Barium	168	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Cadmium	2.9	mg/kg		0.2		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Chromium	80	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Cobalt	8	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Copper	256	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Iron	19900	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Lead	123	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Manganese	947	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Nickel	42	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	89	25047
Vanadium	51	mg/kg		1		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
Zinc	619	mg/kg		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	122	25047
METALS, TOTAL											
Mercury	0.60	mg/kg		0.10		SW7471B	06/24/14 13:03 / sbk	06/23/14 09:49	HGCV201-H_140624A	68	25025
METAL, DRY WEIGHT											
Aluminum	42900	mg/kg-dry		9		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14060106-056
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Arsenic	77	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Barium	408	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Cadmium	7.0	mg/kg-dry		0.2		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Chromium	194	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Cobalt	19	mg/kg-dry		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Copper	621	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Iron	48100	mg/kg-dry		8		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Lead	298	mg/kg-dry		8		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Manganese	2290	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Nickel	101	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 17:21 / dck	06/24/14 08:16	ICPMS204-B_140625A	256	25047
Vanadium	123	mg/kg-dry		2		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Zinc	1500	mg/kg-dry		5		SW6010B	06/25/14 23:42 / sld	06/24/14 08:16	ICP2-HE_140625A	396	25047
Mercury	1.5	mg/kg-dry		0.12		SW7471B	06/24/14 13:03 / sbk	06/23/14 09:49	HGCV201-H_140624A	138	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Lab ID: H14060106-057
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	65.6	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	50	R98310
PHYSICAL CHARACTERISTICS											
Moisture	19.4	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	55	R98453
3050 EXTRACTABLE METALS											
Aluminum	4780	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Arsenic	20	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Barium	79	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Cadmium	0.9	mg/kg		0.2		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Chromium	11	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Copper	104	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Iron	18100	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Lead	50	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Manganese	342	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	148	25048
Vanadium	52	mg/kg		1		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
Zinc	331	mg/kg		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	150	25048
METALS, TOTAL											
Mercury	0.19	mg/kg		0.10		SW7471B	06/24/14 12:19 / sbk	06/23/14 09:49	HGCV201-H_140624A	55	25025
METAL, DRY WEIGHT											
Aluminum	5930	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048

Report Definitions:
RL - Analyte reporting limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Collection Date: 06/02/14 11:15
DateReceived: 06/04/14
Lab ID: H14060106-057
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Arsenic	25	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Barium	98	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Cadmium	1.1	mg/kg-dry		0.2		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Chromium	13	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Copper	129	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Iron	22500	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Lead	62	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Manganese	424	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Nickel	6	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 21:57 / dck	06/24/14 08:17	ICPMS204-B_140625A	241	25048
Vanadium	64	mg/kg-dry		1		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Zinc	411	mg/kg-dry		5		SW6010B	06/26/14 01:25 / sld	06/24/14 08:17	ICP2-HE_140625A	416	25048
Mercury	0.24	mg/kg-dry		0.10		SW7471B	06/24/14 12:19 / sbk	06/23/14 09:49	HGCV201-H_140624A	125	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14060106-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	12.6	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	51	R98310
PHYSICAL CHARACTERISTICS											
Moisture	13.9	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	56	R98453
3050 EXTRACTABLE METALS											
Aluminum	2640	mg/kg		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	169	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Arsenic	9	mg/kg		5		SW6010B	07/03/14 01:56 / sld	06/30/14 08:18	ICP2-HE_140702A	200	25136
Barium	48	mg/kg		5		SW6010B	07/03/14 21:45 / sld	06/30/14 08:16	ICP2-HE_140702A	488	25135
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	169	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Cadmium	0.2	mg/kg		0.2		SW6020	06/26/14 21:25 / dck	06/24/14 08:17	ICPMS204-B_140626B	86	25049
Chromium	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Copper	37	mg/kg		5		SW6010B	07/02/14 01:24 / sld	06/30/14 08:18	ICP2-HE_140701B	188	25136
Iron	5410	mg/kg		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	169	25049
Lead	20	mg/kg		5		SW6010B	07/08/14 18:03 / sld	06/30/14 08:16	ICP2-HE_140708B	122	25135
Manganese	141	mg/kg		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	169	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	169	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	172	25049
Vanadium	12	mg/kg		1		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	169	25049
Zinc	82	mg/kg		5		SW6010B	07/03/14 01:56 / sld	06/30/14 08:18	ICP2-HE_140702A	200	25136
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/24/14 12:29 / sbk	06/23/14 09:49	HGCV201-H_140624A	59	25025
METAL, DRY WEIGHT											
Aluminum	3070	mg/kg-dry		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	432	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14060106-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 11:15
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Arsenic	11	mg/kg-dry		5		SW6010B	07/03/14 01:56 / sld	06/30/14 08:18	ICP2-HE_140702A	634	25136
Barium	56	mg/kg-dry		5		SW6010B	07/03/14 21:45 / sld	06/30/14 08:16	ICP2-HE_140702A	658	25135
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	432	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Cadmium	0.3	mg/kg-dry		0.2		SW6020	06/26/14 21:25 / dck	06/24/14 08:17	ICPMS204-B_140626B	254	25049
Chromium	5	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Copper	43	mg/kg-dry		5		SW6010B	07/02/14 01:24 / sld	06/30/14 08:18	ICP2-HE_140701B	225	25136
Iron	6280	mg/kg-dry		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	432	25049
Lead	23	mg/kg-dry		5		SW6010B	07/08/14 18:03 / sld	06/30/14 08:16	ICP2-HE_140708B	408	25135
Manganese	164	mg/kg-dry		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	432	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	432	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:43 / dck	06/24/14 08:17	ICPMS204-B_140625A	251	25049
Vanadium	13	mg/kg-dry		1		SW6010B	06/26/14 02:35 / sld	06/24/14 08:17	ICP2-HE_140625A	432	25049
Zinc	95	mg/kg-dry		5		SW6010B	07/03/14 01:56 / sld	06/30/14 08:18	ICP2-HE_140702A	634	25136
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/24/14 12:29 / sbk	06/23/14 09:49	HGCV201-H_140624A	129	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Lab ID: H14060106-059
Report Date: 07/14/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	20.3	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	52	R98310
PHYSICAL CHARACTERISTICS											
Moisture	78.8	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	58	R98453
3050 EXTRACTABLE METALS											
Aluminum	11200	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Arsenic	11	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Barium	80	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Cadmium	1.3	mg/kg		0.2		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Chromium	36	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Copper	121	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Iron	10700	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Lead	50	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Manganese	393	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Nickel	21	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Uranium	ND	mg/kg		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	90	25047
Vanadium	24	mg/kg		1		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
Zinc	304	mg/kg		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	123	25047
METALS, TOTAL											
Mercury	0.22	mg/kg		0.10		SW7471B	06/24/14 12:31 / sbk	06/23/14 09:49	HGCV201-H_140624A	60	25025
METAL, DRY WEIGHT											
Aluminum	53000	mg/kg-dry		20		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14060106-059
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Arsenic	53	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Barium	379	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Boron	ND	mg/kg-dry		20		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Cadmium	6.1	mg/kg-dry		0.3		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Chromium	169	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Cobalt	18	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Copper	572	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Iron	50400	mg/kg-dry		10		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Lead	234	mg/kg-dry		10		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Manganese	1860	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Nickel	99	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Uranium	7	mg/kg-dry		5		SW6020	06/25/14 17:26 / dck	06/24/14 08:16	ICPMS204-B_140625A	232	25047
Vanadium	112	mg/kg-dry		3		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Zinc	1430	mg/kg-dry		5		SW6010B	06/25/14 23:45 / sld	06/24/14 08:16	ICP2-HE_140625A	397	25047
Mercury	1.0	mg/kg-dry		0.10		SW7471B	06/24/14 12:31 / sbk	06/23/14 09:49	HGCV201-H_140624A	130	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Lab ID: H14060106-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	55.2	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	53	R98310
PHYSICAL CHARACTERISTICS											
Moisture	28.7	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	59	R98453
3050 EXTRACTABLE METALS											
Aluminum	4740	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Arsenic	14	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Barium	95	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Cadmium	0.7	mg/kg		0.2		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Chromium	8	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Copper	64	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Iron	9900	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Lead	27	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Manganese	270	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	149	25048
Vanadium	25	mg/kg		1		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
Zinc	213	mg/kg		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	151	25048
METALS, TOTAL											
Mercury	0.12	mg/kg		0.10		SW7471B	06/24/14 12:33 / sbk	06/23/14 09:49	HGCV201-H_140624A	61	25025
METAL, DRY WEIGHT											
Aluminum	6650	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Lab ID: H14060106-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Arsenic	20	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Barium	134	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Boron	ND	mg/kg-dry		6		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Cadmium	1.0	mg/kg-dry		0.2		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Chromium	11	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Copper	89	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Iron	13900	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Lead	38	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Manganese	379	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Nickel	7	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Uranium	5	mg/kg-dry		5		SW6020	06/25/14 22:02 / dck	06/24/14 08:17	ICPMS204-B_140625A	242	25048
Vanadium	34	mg/kg-dry		1		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Zinc	299	mg/kg-dry		5		SW6010B	06/26/14 01:29 / sld	06/24/14 08:17	ICP2-HE_140625A	417	25048
Mercury	0.17	mg/kg-dry		0.10		SW7471B	06/24/14 12:33 / sbk	06/23/14 09:49	HGCV201-H_140624A	131	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14060106-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	11.3	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	54	R98310
PHYSICAL CHARACTERISTICS											
Moisture	19.4	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	60	R98453
3050 EXTRACTABLE METALS											
Aluminum	3630	mg/kg		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	170	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Arsenic	12	mg/kg		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	210	25136
Barium	74	mg/kg		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	170	25049
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	170	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Cadmium	0.4	mg/kg		0.2		SW6020	06/26/14 21:29 / dck	06/24/14 08:17	ICPMS204-B_140626B	87	25049
Chromium	7	mg/kg		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	210	25136
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Copper	51	mg/kg		5		SW6010B	07/08/14 18:07 / sld	06/30/14 08:16	ICP2-HE_140708B	123	25135
Iron	6190	mg/kg		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	170	25049
Lead	20	mg/kg		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	210	25136
Manganese	234	mg/kg		5		SW6010B	07/02/14 01:28 / sld	06/30/14 08:18	ICP2-HE_140701B	189	25136
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Nickel	ND	mg/kg		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	210	25136
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	173	25049
Vanadium	12	mg/kg		1		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	170	25049
Zinc	127	mg/kg		5		SW6010B	07/08/14 14:47 / sld	06/30/14 08:16	ICP2-HE_140708B	69	25135
METALS, TOTAL											
Mercury	0.13	mg/kg		0.10		SW7471B	06/24/14 12:36 / sbk	06/23/14 09:49	HGCV201-H_140624A	62	25025
METAL, DRY WEIGHT											
Aluminum	4500	mg/kg-dry		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	433	25049

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14060106-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 10:30
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Arsenic	15	mg/kg-dry		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	639	25136
Barium	92	mg/kg-dry		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	433	25049
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	433	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Cadmium	0.5	mg/kg-dry		0.2		SW6020	06/26/14 21:29 / dck	06/24/14 08:17	ICPMS204-B_140626B	255	25049
Chromium	9	mg/kg-dry		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	639	25136
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Copper	63	mg/kg-dry		5		SW6010B	07/08/14 18:07 / sld	06/30/14 08:16	ICP2-HE_140708B	409	25135
Iron	7680	mg/kg-dry		5		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	433	25049
Lead	25	mg/kg-dry		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	639	25136
Manganese	290	mg/kg-dry		5		SW6010B	07/02/14 01:28 / sld	06/30/14 08:18	ICP2-HE_140701B	226	25136
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Nickel	5	mg/kg-dry		5		SW6010B	07/03/14 02:33 / sld	06/30/14 08:18	ICP2-HE_140702A	639	25136
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:48 / dck	06/24/14 08:17	ICPMS204-B_140625A	252	25049
Vanadium	15	mg/kg-dry		1		SW6010B	06/26/14 02:39 / sld	06/24/14 08:17	ICP2-HE_140625A	433	25049
Zinc	157	mg/kg-dry		5		SW6010B	07/08/14 14:47 / sld	06/30/14 08:16	ICP2-HE_140708B	368	25135
Mercury	0.17	mg/kg-dry		0.10		SW7471B	06/24/14 12:36 / sbk	06/23/14 09:49	HGCV201-H_140624A	132	25025

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve <0.065mm
Lab ID: H14060106-062
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	8.0	wt% Passed		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	55	R98310
PHYSICAL CHARACTERISTICS											
Moisture	56.4	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	61	R98453
3050 EXTRACTABLE METALS											
Aluminum	10600	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Antimony	ND	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Arsenic	18	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Barium	86	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Beryllium	ND	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Boron	ND	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Cadmium	1.6	mg/kg		0.2		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Chromium	36	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Cobalt	ND	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Copper	152	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Iron	11500	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Lead	53	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Manganese	640	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Nickel	19	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Selenium	ND	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Silver	ND	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Uranium	8	mg/kg		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	91	25047
Vanadium	30	mg/kg		1		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
Zinc	307	mg/kg		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	124	25047
METALS, TOTAL											
Mercury	0.36	mg/kg		0.10		SW7471B	06/26/14 14:05 / sbk	06/24/14 11:12	HGCV201-H_140626A	11	25053
METAL, DRY WEIGHT											
Aluminum	24300	mg/kg-dry		7		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve <0.065mm
Lab ID: H14060106-062
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00 **DateReceived:** 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Arsenic	42	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Barium	198	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Beryllium	ND	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Boron	ND	mg/kg-dry		10		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Cadmium	3.6	mg/kg-dry		0.2		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Chromium	83	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Cobalt	10	mg/kg-dry		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Copper	350	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Iron	26400	mg/kg-dry		6		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Lead	122	mg/kg-dry		7		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Manganese	1470	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Nickel	43	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Uranium	17	mg/kg-dry		5		SW6020	06/25/14 17:30 / dck	06/24/14 08:16	ICPMS204-B_140625A	233	25047
Vanadium	68	mg/kg-dry		2		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Zinc	705	mg/kg-dry		5		SW6010B	06/25/14 23:49 / sld	06/24/14 08:16	ICP2-HE_140625A	398	25047
Mercury	0.84	mg/kg-dry		0.10		SW7471B	06/26/14 14:05 / sbk	06/24/14 11:12	HGCV201-H_140626A	44	25053

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 0.065-1mm
Lab ID: H14060106-063
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	65.6	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	56	R98310
PHYSICAL CHARACTERISTICS											
Moisture	20.7	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	62	R98453
3050 EXTRACTABLE METALS											
Aluminum	4180	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Antimony	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Arsenic	12	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Barium	88	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Boron	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Cadmium	0.6	mg/kg		0.2		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Chromium	9	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Cobalt	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Copper	52	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Iron	9850	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Lead	31	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Manganese	366	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Nickel	ND	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Selenium	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Silver	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Uranium	ND	mg/kg		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	150	25048
Vanadium	28	mg/kg		1		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
Zinc	209	mg/kg		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	152	25048
METALS, TOTAL											
Mercury	0.14	mg/kg		0.10		SW7471B	06/26/14 14:08 / sbk	06/24/14 11:12	HGCV201-H_140626A	12	25053
METAL, DRY WEIGHT											
Aluminum	5270	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 0.065-1mm
Lab ID: H14060106-063
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Arsenic	15	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Barium	111	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Cadmium	0.8	mg/kg-dry		0.2		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Chromium	11	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Copper	66	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Iron	12400	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Lead	39	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Manganese	461	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Nickel	5	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 22:06 / dck	06/24/14 08:17	ICPMS204-B_140625A	243	25048
Vanadium	35	mg/kg-dry		1		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Zinc	263	mg/kg-dry		5		SW6010B	06/26/14 01:33 / sld	06/24/14 08:17	ICP2-HE_140625A	418	25048
Mercury	0.18	mg/kg-dry		0.10		SW7471B	06/26/14 14:08 / sbk	06/24/14 11:12	HGCV201-H_140626A	45	25053

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 1-2mm
Lab ID: H14060106-064
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	8.8	wt% retained		0.1		ASA15-2	06/09/14 12:57 / sbk		MISC SOILS_140609B	57	R98310
PHYSICAL CHARACTERISTICS											
Moisture	17.1	wt%	H	0.2		D2974	06/30/14 17:46 / edp		RYING OVEN 2_140627A	63	R98453
3050 EXTRACTABLE METALS											
Aluminum	3080	mg/kg		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Antimony	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Arsenic	11	mg/kg		5		SW6010B	07/03/14 02:37 / sld	06/30/14 08:18	ICP2-HE_140702A	211	25136
Barium	71	mg/kg		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Beryllium	ND	mg/kg		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Boron	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Cadmium	0.4	mg/kg		0.2		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Chromium	7	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Cobalt	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Copper	57	mg/kg		5		SW6010B	07/02/14 01:32 / sld	06/30/14 08:18	ICP2-HE_140701B	190	25136
Iron	6430	mg/kg		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Lead	18	mg/kg		5		SW6010B	07/03/14 02:37 / sld	06/30/14 08:18	ICP2-HE_140702A	211	25136
Manganese	225	mg/kg		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Molybdenum	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Nickel	ND	mg/kg		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Selenium	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Silver	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Uranium	ND	mg/kg		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	174	25049
Vanadium	16	mg/kg		1		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	173	25049
Zinc	105	mg/kg		5		SW6010B	07/03/14 02:37 / sld	06/30/14 08:18	ICP2-HE_140702A	211	25136
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	06/26/14 14:10 / sbk	06/24/14 11:12	HGCV201-H_140626A	13	25053
METAL, DRY WEIGHT											
Aluminum	3710	mg/kg-dry		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049

Report Definitions:
RL - Analyte reporting limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 1-2mm
Lab ID: H14060106-064
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 06/02/14 09:00
DateReceived: 06/04/14
Report Date: 07/14/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Arsenic	13	mg/kg-dry		5		SW6010B	07/03/14 02:37 / sld	06/30/14 08:18	ICP2-HE_140702A	640	25136
Barium	86	mg/kg-dry		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049
Beryllium	ND	mg/kg-dry		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049
Boron	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Cadmium	0.5	mg/kg-dry		0.2		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Chromium	9	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Cobalt	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Copper	68	mg/kg-dry		5		SW6010B	07/02/14 01:32 / sld	06/30/14 08:18	ICP2-HE_140701B	227	25136
Iron	7750	mg/kg-dry		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049
Lead	21	mg/kg-dry		5		SW6010B	07/03/14 02:37 / sld	06/30/14 08:18	ICP2-HE_140702A	640	25136
Manganese	271	mg/kg-dry		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049
Molybdenum	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Nickel	ND	mg/kg-dry		5		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049
Selenium	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Silver	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Uranium	ND	mg/kg-dry		5		SW6020	06/25/14 23:52 / dck	06/24/14 08:17	ICPMS204-B_140625A	253	25049
Vanadium	19	mg/kg-dry		1		SW6010B	06/26/14 02:50 / sld	06/24/14 08:17	ICP2-HE_140625A	436	25049
Zinc	126	mg/kg-dry		5		SW6010B	07/03/14 02:37 / sld	06/30/14 08:18	ICP2-HE_140702A	640	25136
Mercury	ND	mg/kg-dry		0.10		SW7471B	06/26/14 14:10 / sbk	06/24/14 11:12	HGCV201-H_140626A	46	25053

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140610wa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **06/10/14 11:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **06/10/14 11:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		105	95	105				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 18** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **06/10/14 12:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		105	90	110				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 32** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **06/10/14 13:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		108	90	110				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 48** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **06/10/14 14:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		110	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140610wa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 48** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **06/10/14 14:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140611wa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140611A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **06/11/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		97	90	110				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **06/11/14 09:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		104	95	105				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 40** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **06/11/14 13:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00022	0.00010	0.0002		109	90	110				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 80** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **06/11/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		97	90	110				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 81** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **06/11/14 09:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		104	95	105				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140611wa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140611A: 60** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7470A**

Analysis Date: **06/11/14 15:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		96	90	110				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140620sa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**
Analysis Date: **06/20/14 10:41** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00096	0.50	0.001		96	90	110				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **06/20/14 10:43** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0023	0.50	0.0025		92	90	110				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 20** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **06/20/14 11:26** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025		98	90	110				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 33** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **06/20/14 11:57** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		100	90	110				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 38** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **06/20/14 12:19** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		98	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140620sa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 38** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/20/14 12:19** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140624sa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **06/24/14 10:10** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0010	0.50	0.001		105	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/24/14 10:13** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025		95	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 20** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/24/14 10:55** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025		95	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140624sa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 33** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/24/14 11:26** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025		95	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/24/14 12:09** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025		95	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 63** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/24/14 12:38** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		99	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140624sa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 69** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/24/14 13:05** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		100	90	110				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140626sa

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140626A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **06/26/14 13:42** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0010	0.50	0.001		101	90	110				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/26/14 13:44** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		99	90	110				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 32** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **06/26/14 14:55** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		106	90	110				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140609A: 22** SampType: **Method Blank** Lab ID: **MB-24814** Method: **E200.7**
Analysis Date: **06/09/14 11:36** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.003									
Boron	0.005	0.002									
Calcium	0.04	0.03									
Iron	ND	0.005									
Magnesium	0.01	0.01									
Potassium	ND	0.05									
Sodium	ND	0.02									

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 23** SampType: **Laboratory Control Sample** Lab ID: **LCS-24814** Method: **E200.7**
Analysis Date: **06/09/14 11:40** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.50	0.030	2.5		100	85	115				
Boron	0.507	0.050	0.5	0.00508	100	85	115				
Calcium	23.6	1.0	25	0.04198	94	85	115				
Iron	2.38	0.020	2.5		95	85	115				
Magnesium	24.1	1.0	25	0.01252	96	85	115				
Potassium	24.8	1.0	25		99	85	115				
Sodium	24.8	1.0	25		99	85	115				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 25** SampType: **Serial Dilution** Lab ID: **H14060106-001CDIL** Method: **E200.7**
Analysis Date: **06/09/14 11:48** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.329	0.030				0	0	0.3645	10	10	R
Boron	0.0311	0.050				0	0	0.03201		10	N
Calcium	30.8	1.0				0	0	31.41	1.8	10	
Iron	1.02	0.027				0	0	1.017	0.1	10	
Magnesium	7.57	1.0				0	0	7.948	4.9	10	
Potassium	2.64	1.0				0	0	2.978	12	10	R
Sodium	12.6	1.0				0	0	12.74	0.8	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140609A: 25** SampType: **Serial Dilution** Lab ID: **H14060106-001CDIL** Method: **E200.7**
Analysis Date: **06/09/14 11:48** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 26** SampType: **Sample Matrix Spike** Lab ID: **H14060106-001CMS3** Method: **E200.7**
Analysis Date: **06/09/14 11:52** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.00	0.030	2.5	0.3645	105	70	130				
Boron	0.545	0.050	0.5	0.03201	103	70	130				
Calcium	55.9	1.0	25	31.41	98	70	130				
Iron	3.47	0.020	2.5	1.017	98	70	130				
Magnesium	33.2	1.0	25	7.948	101	70	130				
Potassium	28.2	1.0	25	2.978	101	70	130				
Sodium	37.8	1.0	25	12.74	100	70	130				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-001CMSD3** Method: **E200.7**
Analysis Date: **06/09/14 11:55** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.01	0.030	2.5	0.3645	106	70	130	2.997	0.5	20	
Boron	0.512	0.050	0.5	0.03201	96	70	130	0.5447	6.2	20	
Calcium	54.2	1.0	25	31.41	91	70	130	55.86	3.0	20	
Iron	3.40	0.020	2.5	1.017	95	70	130	3.471	2.1	20	
Magnesium	31.7	1.0	25	7.948	95	70	130	33.2	4.7	20	
Potassium	27.9	1.0	25	2.978	100	70	130	28.17	0.8	20	
Sodium	37.7	1.0	25	12.74	100	70	130	37.82	0.4	20	

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 40** SampType: **Serial Dilution** Lab ID: **H14060106-011CDIL** Method: **E200.7**
Analysis Date: **06/09/14 12:44** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.201	0.030				0	0	0.2022	0.8	10	
Boron	0.0433	0.050				0	0	0.04114		10	N

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140609A: 40** SampType: **Serial Dilution** Lab ID: **H14060106-011CDIL** Method: **E200.7**
Analysis Date: **06/09/14 12:44** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	37.7	1.0				0	0	36.84	2.3	10	
Iron	0.559	0.027				0	0	0.5521	1.2	10	
Magnesium	8.69	1.0				0	0	8.464	2.6	10	
Potassium	4.35	1.0				0	0	4.487	3.1	10	
Sodium	24.1	1.0				0	0	23.97	0.4	10	

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 41** SampType: **Sample Matrix Spike** Lab ID: **H14060106-011CMS3** Method: **E200.7**
Analysis Date: **06/09/14 12:48** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.91	0.030	2.5	0.2022	108	70	130				
Boron	0.512	0.050	0.5	0.04114	94	70	130				
Calcium	58.1	1.0	25	36.84	85	70	130				
Iron	3.10	0.020	2.5	0.5521	102	70	130				
Magnesium	31.1	1.0	25	8.464	91	70	130				
Potassium	28.4	1.0	25	4.487	96	70	130				
Sodium	46.9	1.0	25	23.97	92	70	130				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 42** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-011CMSD3** Method: **E200.7**
Analysis Date: **06/09/14 12:51** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.96	0.030	2.5	0.2022	110	70	130	2.911	1.7	20	
Boron	0.531	0.050	0.5	0.04114	98	70	130	0.512	3.6	20	
Calcium	60.3	1.0	25	36.84	94	70	130	58.08	3.8	20	
Iron	3.16	0.020	2.5	0.5521	104	70	130	3.096	2.1	20	
Magnesium	32.4	1.0	25	8.464	96	70	130	31.1	3.9	20	
Potassium	29.4	1.0	25	4.487	100	70	130	28.38	3.6	20	
Sodium	48.5	1.0	25	23.97	98	70	130	46.9	3.3	20	

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 35** SampType: **Method Blank** Lab ID: **MB-24814** Method: **E200.8**

Analysis Date: **06/11/14 19:39** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5E-05	3E-05									
Arsenic	ND	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Cadmium	ND	3E-05									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	ND	0.002									
Lead	ND	3E-05									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Selenium	ND	0.0002									
Silver	0.0001	7E-05									
Uranium	ND	3E-05									
Vanadium	ND	7E-05									
Zinc	0.001	0.001									

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 36** SampType: **Laboratory Control Sample** Lab ID: **LCS-24814** Method: **E200.8**

Analysis Date: **06/11/14 19:44** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.493	0.0010	0.5	0.000048	99	85	115				
Arsenic	0.509	0.0010	0.5		102	85	115				
Barium	0.481	0.050	0.5		96	85	115				
Beryllium	0.237	0.0010	0.25		95	85	115				
Cadmium	0.244	0.0010	0.25		97	85	115				
Chromium	0.504	0.0050	0.5		101	85	115				
Cobalt	0.451	0.0050	0.5		90	85	115				
Copper	0.482	0.0050	0.5		96	85	115				
Iron	2.39	0.020	2.5		96	85	115				
Lead	0.485	0.0010	0.5		97	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 36** SampType: **Laboratory Control Sample** Lab ID: **LCS-24814** Method: **E200.8**

Analysis Date: **06/11/14 19:44** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2.28	0.0010	2.5		91	85	115				
Molybdenum	0.512	0.0010	0.5		102	85	115				
Nickel	0.489	0.0050	0.5		98	85	115				
Selenium	0.510	0.0010	0.5		102	85	115				
Silver	0.0471	0.0010	0.05	0.0001092	94	85	115				
Uranium	0.476	0.00030	0.5		95	85	115				
Vanadium	0.499	0.010	0.5		100	85	115				
Zinc	0.492	0.010	0.5	0.001315	98	85	115				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 40** SampType: **Sample Matrix Spike** Lab ID: **H14060106-001CMS3** Method: **E200.8**

Analysis Date: **06/11/14 20:01** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.499	0.0010	0.5	0.0004859	100	70	130				
Arsenic	0.525	0.0010	0.5	0.01085	103	70	130				
Barium	0.521	0.050	0.5	0.03171	98	70	130				
Beryllium	0.237	0.0010	0.25		95	70	130				
Cadmium	0.244	0.0010	0.25	0.0001656	98	70	130				
Chromium	0.510	0.0050	0.5	0.0006703	102	70	130				
Cobalt	0.457	0.0050	0.5	0.000347	91	70	130				
Copper	0.515	0.0050	0.5	0.02527	98	70	130				
Iron	3.38	0.020	2.5	1.023	94	70	130				
Lead	0.504	0.0010	0.5	0.005838	100	70	130				
Manganese	2.41	0.0010	2.5	0.09622	92	70	130				
Molybdenum	0.526	0.0010	0.5	0.005503	104	70	130				
Nickel	0.495	0.0050	0.5	0.0006765	99	70	130				
Selenium	0.491	0.0010	0.5	0.0002238	98	70	130				
Silver	0.0475	0.0010	0.05	0.0001533	95	70	130				
Uranium	0.494	0.00030	0.5	0.002639	98	70	130				
Vanadium	0.512	0.010	0.5	0.003553	102	70	130				
Zinc	0.519	0.010	0.5	0.03494	97	70	130				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-001CMSD3** Method: **E200.8**

Analysis Date: **06/11/14 20:05** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.508	0.0010	0.5	0.0004859	101	70	130	0.4991	1.7	20	
Arsenic	0.524	0.0010	0.5	0.01085	103	70	130	0.5246	0.0	20	
Barium	0.528	0.050	0.5	0.03171	99	70	130	0.5214	1.2	20	
Beryllium	0.238	0.0010	0.25		95	70	130	0.2368	0.4	20	
Cadmium	0.242	0.0010	0.25	0.0001656	97	70	130	0.2442	0.9	20	
Chromium	0.515	0.0050	0.5	0.0006703	103	70	130	0.5102	1.0	20	
Cobalt	0.453	0.0050	0.5	0.000347	91	70	130	0.4566	0.7	20	
Copper	0.514	0.0050	0.5	0.02527	98	70	130	0.5153	0.2	20	
Iron	3.44	0.020	2.5	1.023	97	70	130	3.385	1.6	20	
Lead	0.502	0.0010	0.5	0.005838	99	70	130	0.504	0.4	20	
Manganese	2.38	0.0010	2.5	0.09622	91	70	130	2.406	1.3	20	
Molybdenum	0.533	0.0010	0.5	0.005503	105	70	130	0.5263	1.3	20	
Nickel	0.493	0.0050	0.5	0.0006765	99	70	130	0.4951	0.3	20	
Selenium	0.501	0.0010	0.5	0.0002238	100	70	130	0.4912	2.0	20	
Silver	0.0478	0.0010	0.05	0.0001533	95	70	130	0.04752	0.6	20	
Uranium	0.492	0.00030	0.5	0.002639	98	70	130	0.4945	0.5	20	
Vanadium	0.515	0.010	0.5	0.003553	102	70	130	0.5125	0.5	20	
Zinc	0.513	0.010	0.5	0.03494	96	70	130	0.5189	1.1	20	

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 74** SampType: **Sample Matrix Spike** Lab ID: **H14060106-011CMS3** Method: **E200.8**

Analysis Date: **06/11/14 22:30** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.489	0.0010	0.5	0.0004669	98	70	130				
Arsenic	0.516	0.0010	0.5	0.01522	100	70	130				
Barium	0.521	0.050	0.5	0.03333	97	70	130				
Beryllium	0.233	0.0010	0.25		93	70	130				
Cadmium	0.240	0.0010	0.25	0.000274	96	70	130				
Chromium	0.491	0.0050	0.5	0.0004603	98	70	130				
Cobalt	0.442	0.0050	0.5	0.0004076	88	70	130				
Copper	0.502	0.0050	0.5	0.02189	96	70	130				
Iron	3.10	0.020	2.5	0.5685	101	70	130				
Lead	0.492	0.0010	0.5	0.003658	98	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24814

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 74** SampType: **Sample Matrix Spike** Lab ID: **H14060106-011CMS3** Method: **E200.8**

Analysis Date: **06/11/14 22:30** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2.41	0.0010	2.5	0.1925	89	70	130				
Molybdenum	0.514	0.0010	0.5	0.004465	102	70	130				
Nickel	0.483	0.0050	0.5	0.001082	96	70	130				
Selenium	0.477	0.0010	0.5	0.0002257	95	70	130				
Silver	0.0470	0.0010	0.05	0.0000979	94	70	130				
Uranium	0.478	0.00030	0.5	0.003525	95	70	130				
Vanadium	0.497	0.010	0.5	0.003151	99	70	130				
Zinc	0.523	0.010	0.5	0.05653	93	70	130				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 75** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-011CMSD3** Method: **E200.8**

Analysis Date: **06/11/14 22:34** Units: **mg/L** **Prep Info:** Prep Date: **6/5/2014** Prep Method: **E200.2**

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.508	0.0010	0.5	0.0004669	101	70	130	0.4888	3.8	20	
Arsenic	0.530	0.0010	0.5	0.01522	103	70	130	0.5157	2.8	20	
Barium	0.530	0.050	0.5	0.03333	99	70	130	0.5206	1.8	20	
Beryllium	0.240	0.0010	0.25		96	70	130	0.2327	3.2	20	
Cadmium	0.240	0.0010	0.25	0.000274	96	70	130	0.2401	0.0	20	
Chromium	0.511	0.0050	0.5	0.0004603	102	70	130	0.4908	4.1	20	
Cobalt	0.451	0.0050	0.5	0.0004076	90	70	130	0.442	1.9	20	
Copper	0.525	0.0050	0.5	0.02189	101	70	130	0.5019	4.6	20	
Iron	3.12	0.020	2.5	0.5685	102	70	130	3.104	0.4	20	
Lead	0.499	0.0010	0.5	0.003658	99	70	130	0.492	1.5	20	
Manganese	2.45	0.0010	2.5	0.1925	90	70	130	2.407	1.8	20	
Molybdenum	0.534	0.0010	0.5	0.004465	106	70	130	0.5141	3.9	20	
Nickel	0.501	0.0050	0.5	0.001082	100	70	130	0.4827	3.7	20	
Selenium	0.494	0.0010	0.5	0.0002257	99	70	130	0.4769	3.4	20	
Silver	0.0474	0.0010	0.05	0.0000979	95	70	130	0.04697	0.9	20	
Uranium	0.496	0.00030	0.5	0.003525	98	70	130	0.4776	3.7	20	
Vanadium	0.512	0.010	0.5	0.003151	102	70	130	0.4971	2.9	20	
Zinc	0.540	0.010	0.5	0.05653	97	70	130	0.5233	3.0	20	

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24831

Date: *14-Jul-14*

Run ID :Run Order: **FIA202-HE_140606A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24831** Method: **E365.1**
Analysis Date: **06/06/14 10:49** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.393	0.010	0.4		98	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D**

Run ID :Run Order: **FIA202-HE_140606A: 12** SampType: **Method Blank** Lab ID: **MB-24831** Method: **E365.1**
Analysis Date: **06/06/14 10:50** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D**

Run ID :Run Order: **FIA202-HE_140606A: 43** SampType: **Sample Matrix Spike** Lab ID: **H14060106-002DMS** Method: **E365.1**
Analysis Date: **06/06/14 11:22** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.644	0.010	0.2	0.4352	105	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D**

Run ID :Run Order: **FIA202-HE_140606A: 44** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-002DMSD** Method: **E365.1**
Analysis Date: **06/06/14 11:23** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.668	0.010	0.2	0.4352	116	90	110	0.6444	3.6	20	S

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24832

Date: *14-Jul-14*

Run ID :Run Order: **FIA202-HE_140606A: 47** SampType: **Laboratory Control Sample** Lab ID: **LCS-24832** Method: **E365.1**
Analysis Date: **06/06/14 11:26** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.379	0.010	0.4		95	90	110				

Associated samples: **H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 48** SampType: **Method Blank** Lab ID: **MB-24832** Method: **E365.1**
Analysis Date: **06/06/14 11:27** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 50** SampType: **Sample Matrix Spike** Lab ID: **H14060106-012Dms** Method: **E365.1**
Analysis Date: **06/06/14 11:29** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.523	0.010	0.2	0.3026	110	90	110				

Associated samples: **H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-012Dmsd** Method: **E365.1**
Analysis Date: **06/06/14 11:30** Units: **mg/L** **Prep Info:** Prep Date: **6/6/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.510	0.010	0.2	0.3026	104	90	110	0.5232	2.5	20	

Associated samples: **H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24850

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 4** SampType: **Method Blank** Lab ID: **MB-24850** Method: **E245.1**
Analysis Date: **06/10/14 11:40** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C**

Run ID :Run Order: **HGCV202-H_140610A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-24850** Method: **E245.1**
Analysis Date: **06/10/14 11:44** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		91	90	110				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C**

Run ID :Run Order: **HGCV202-H_140610A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14060106-002BMS** Method: **E245.1**
Analysis Date: **06/10/14 13:17** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000436	98	70	130				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C**

Run ID :Run Order: **HGCV202-H_140610A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-002BMSD** Method: **E245.1**
Analysis Date: **06/10/14 13:21** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000436	96	70	130	0.0001508	1.2	20	

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24851

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 34** SampType: **Method Blank** Lab ID: **MB-24851** Method: **E245.1**
Analysis Date: **06/10/14 13:47** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2E-06	1E-06									

Associated samples: **H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 35** SampType: **Laboratory Control Sample** Lab ID: **LCS-24851** Method: **E245.1**
Analysis Date: **06/10/14 13:51** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000154	98	90	110				

Associated samples: **H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 41** SampType: **Sample Matrix Spike** Lab ID: **H14060106-006BMS** Method: **E245.1**
Analysis Date: **06/10/14 14:16** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000474	96	70	130				

Associated samples: **H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 42** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-006BMSD** Method: **E245.1**
Analysis Date: **06/10/14 14:21** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000474	96	70	130	0.0001494	0.5	20	

Associated samples: **H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 57** SampType: **Sample Matrix Spike** Lab ID: **H14060106-012BMS** Method: **E245.1**
Analysis Date: **06/10/14 15:24** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000577	99	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24851

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140610A: 57** SampType: **Sample Matrix Spike** Lab ID: **H14060106-012BMS** Method: **E245.1**

Analysis Date: **06/10/14 15:24** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Run ID :Run Order: **HGCV202-H_140610A: 58** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-012BMSD** Method: **E245.1**

Analysis Date: **06/10/14 15:28** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000577	93	70	130	0.0001542	5.7	20	

Associated samples: **H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24860

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140609B: 20** SampType: **Laboratory Control Sample** Lab ID: **LCS-24860** Method: **A4500 N-C**
Analysis Date: **06/09/14 12:56** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	18.7	0.30	18.7		100	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Run ID :Run Order: **FIA203-HE_140609B: 21** SampType: **Method Blank** Lab ID: **MB-24860** Method: **A4500 N-C**
Analysis Date: **06/09/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Run ID :Run Order: **FIA203-HE_140609B: 23** SampType: **Sample Matrix Spike** Lab ID: **H14060105-001Ams** Method: **A4500 N-C**
Analysis Date: **06/09/14 13:00** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.04	0.10	1		104	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Run ID :Run Order: **FIA203-HE_140609B: 24** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-001Amsd** Method: **A4500 N-C**
Analysis Date: **06/09/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: **6/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.05	0.10	1		105	90	110	1.037	0.9	20	

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24881

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140611A: 4** SampType: **Method Blank** Lab ID: **MB-24881** Method: **E245.1**
Analysis Date: **06/11/14 09:55** Units: **mg/L** **Prep Info:** Prep Date: **6/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2E-06	1E-06									

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 6** SampType: **Laboratory Control Sample** Lab ID: **LCS-24881** Method: **E245.1**
Analysis Date: **06/11/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: **6/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000219	98	90	110				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 10** SampType: **Sample Matrix Spike** Lab ID: **H14060106-015BMS** Method: **E245.1**
Analysis Date: **06/11/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: **6/10/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000681	98	70	130				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 11** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-015BMSD** Method: **E245.1**
Analysis Date: **06/11/14 10:24** Units: **mg/L** **Prep Info:** Prep Date: **6/10/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000681	95	70	130	0.000154	2.9	20	

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 89** SampType: **Sample Matrix Spike** Lab ID: **H14060106-015BMS** Method: **E245.1**
Analysis Date: **06/11/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000681	98	70	130				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 90** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-015BMSD** Method: **E245.1**
Analysis Date: **06/11/14 10:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000681	95	70	130	0.000154	2.9	20	

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24881

Date: *14-Jul-14*

Run ID :Run Order: **HGCV202-H_140611A: 84** SampType: **Method Blank** Lab ID: **MB-24835** Method: **SW7470A**
Analysis Date: **06/11/14 09:59** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	3E-06	1E-06									

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 85** SampType: **Laboratory Control Sample** Lab ID: **LCS-24881** Method: **SW7470A**
Analysis Date: **06/11/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: **6/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000307	97	90	110				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 108** SampType: **Sample Matrix Spike** Lab ID: **H14060114-005DMS** Method: **SW7470A**
Analysis Date: **06/11/14 12:00** Units: **mg/L** **Prep Info:** Prep Date: **6/12/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000322	99	85	115				

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **HGCV202-H_140611A: 109** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060114-005DMSD** Method: **SW7470A**
Analysis Date: **06/11/14 12:04** Units: **mg/L** **Prep Info:** Prep Date: **6/12/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00000322	99	85	115	0.0001523	0.1	20	

Associated samples: **H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24900

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140612A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24900** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:08** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	17.9	0.30	18.7		96	90	110				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612A: 12** SampType: **Method Blank** Lab ID: **MB-24900** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:09** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612A: 14** SampType: **Sample Duplicate** Lab ID: **H14050278-017Adup** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.10								20	

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612A: 16** SampType: **Sample Matrix Spike** Lab ID: **H14060106-006AMS** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:14** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	7.22	0.15	5	2.46	95	90	110				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612A: 17** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-006AMSD** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:15** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	7.63	0.15	5	2.46	103	90	110	7.225	5.5	20	

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 24900

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140612B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-24900** Method: **A4500 N-C**
Analysis Date: **06/12/14 10:43** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	19.0	0.30	18.7		102	90	110				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612B: 12** SampType: **Method Blank** Lab ID: **MB-24900** Method: **A4500 N-C**
Analysis Date: **06/12/14 10:44** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612B: 14** SampType: **Sample Matrix Spike** Lab ID: **H14060106-014AMS** Method: **A4500 N-C**
Analysis Date: **06/12/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	5.87	0.15	5	0.8545	100	90	110				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612B: 15** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-014AMSD** Method: **A4500 N-C**
Analysis Date: **06/12/14 10:48** Units: **mg/L** **Prep Info:** Prep Date: **6/11/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	5.66	0.15	5	0.8545	96	90	110	5.87	3.6	20	

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25007

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 4** SampType: **Method Blank** Lab ID: **MB-25007** Method: **SW7471B**
Analysis Date: **06/20/14 10:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0006	0.0003									

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-25007** Method: **SW7471B**
Analysis Date: **06/20/14 10:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.6	0.50	5	0.000592	93	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 6** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25007** Method: **SW7471B**
Analysis Date: **06/20/14 10:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		100	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 10** SampType: **Sample Matrix Spike** Lab ID: **H14060105-008AMS** Method: **SW7471B**
Analysis Date: **06/20/14 11:02** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	0.9901	0.01396	101	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 11** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-008AMSD** Method: **SW7471B**
Analysis Date: **06/20/14 11:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.99	0.50	0.9852	0.01396	99	80	120	1.01	2.1	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25007

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140620A: 11** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-008AMSD** Method: **SW7471B**

Analysis Date: **06/20/14 11:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 29** SampType: **Sample Matrix Spike** Lab ID: **H14060106-024AMS** Method: **SW7471B**

Analysis Date: **06/20/14 11:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.5	0.50	1.005	0.4331	103	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Run ID :Run Order: **HGCV201-H_140620A: 30** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-024AMSD** Method: **SW7471B**

Analysis Date: **06/20/14 11:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/19/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	1.007	0.4331	86	80	120	1.464	12	20	

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 130** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6010B**

Analysis Date: **06/24/14 23:56** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.3									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	0.2	0.1									
Copper	ND	0.2									
Iron	1	0.6									
Manganese	0.02	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.2	0.09									

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140624B: 131** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25019** Method: **SW6010B**

Analysis Date: **06/25/14 00:00** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	257	5.0	250		103	80	120				
Barium	51.7	1.0	50		103	80	120				
Beryllium	24.9	1.0	25		100	80	120				
Boron	48.3	1.0	50	0.17	96	80	120				
Copper	51.5	1.0	50		103	80	120				
Iron	255	5.0	250	1.046	102	80	120				
Manganese	246	1.0	250	0.0205	98	80	120				
Nickel	48.6	1.0	50		97	80	120				
Vanadium	50.3	1.0	50		101	80	120				
Zinc	47.9	1.0	50	0.24	95	80	120				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 132** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6010B**

Analysis Date: **06/25/14 00:04** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13800	5.0	14700		94	50.7	131.3				
Barium	596	1.0	614		97	80.6	112.2				
Beryllium	45.4	1.0	51		89	76.3	108.6				
Boron	75.9	1.0	93.2	0.17	81	59.4	101.9				
Copper	267	1.1	280		95	77.5	109.6				
Iron	20200	5.0	23000	1.046	88	39.6	138.3				
Manganese	365	1.0	369	0.0205	99	80.8	115.7				
Nickel	52.7	1.0	61		86	72.3	103.4				
Vanadium	66.0	1.0	73		90	66.6	107.3				
Zinc	183	1.0	213	0.24	86	74.2	109.9				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140624B: 155** SampType: **Serial Dilution** Lab ID: **H14060106-046ADIL** Method: **SW6010B**

Analysis Date: **06/25/14 01:29** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3870	16				0	0	3777	2.5	10	
Barium	85.1	1.0				0	0	83.76	1.6	10	
Beryllium	ND	1.0				0	0	0.2184		10	
Boron	ND	2.4				0	0	1.007		10	
Copper	12.0	5.2				0	0	11.84		10	N
Iron	6260	14				0	0	6044	3.5	10	
Manganese	198	1.0				0	0	192.4	2.9	10	
Nickel	5.11	1.7				0	0	4.89		10	N
Vanadium	14.4	3.5				0	0	11.58		10	N
Zinc	111	2.2				0	0	109.6	1.5	10	

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 156** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-046APDS** Method: **SW6010B**

Analysis Date: **06/25/14 01:33** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4960	5.0	1215	3777	97	75	125				
Barium	312	1.0	242.9	83.76	94	75	125				
Beryllium	109	1.0	121.5	0.2184	90	75	125				
Boron	211	1.0	242.9	1.007	86	75	125				
Copper	238	1.1	242.9	11.84	93	75	125				
Iron	7080	5.0	1215	6044		75	125				A
Manganese	1260	1.0	1215	192.4	88	75	125				
Nickel	214	1.0	242.9	4.89	86	75	125				
Vanadium	232	1.0	242.9	11.58	91	75	125				
Zinc	311	1.0	242.9	109.6	83	75	125				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140624B: 166** SampType: **Sample Matrix Spike** Lab ID: **H14060106-046AMS** Method: **SW6010B**

Analysis Date: **06/25/14 02:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4650	5.0	235.8	3777		75	125				A
Barium	163	1.0	47.17	83.76	169	75	125				S
Beryllium	23.3	1.0	23.58	0.2184	98	75	125				
Boron	43.9	1.0	47.17	1.007	91	75	125				
Copper	75.6	1.0	47.17	11.84	135	75	125				S
Iron	5130	5.0	235.8	6044		75	125				A
Manganese	389	1.0	235.8	192.4	83	75	125				
Nickel	51.5	1.0	47.17	4.89	99	75	125				
Vanadium	56.6	1.0	47.17	11.58	95	75	125				
Zinc	113	1.0	47.17	109.6	8	75	125				S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 167** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-046AMSD** Method: **SW6010B**

Analysis Date: **06/25/14 02:13** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4690	5.0	235.8	3777		75	125	4651	0.8	20	A
Barium	138	1.0	47.17	83.76	116	75	125	163.3	17	20	
Beryllium	23.0	1.0	23.58	0.2184	97	75	125	23.25	0.9	20	
Boron	42.8	1.0	47.17	1.007	89	75	125	43.94	2.7	20	
Copper	56.0	1.0	47.17	11.84	94	75	125	75.58	30	20	R
Iron	5360	5.0	235.8	6044		75	125	5125	4.5	20	A
Manganese	396	1.0	235.8	192.4	86	75	125	388.8	1.9	20	
Nickel	51.1	1.0	47.17	4.89	98	75	125	51.54	0.9	20	
Vanadium	56.0	1.0	47.17	11.58	94	75	125	56.57	0.9	20	
Zinc	120	1.0	47.17	109.6	22	75	125	113.3	5.9	20	S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140625A: 48** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6010B**

Analysis Date: **06/25/14 19:09** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	ND	0.02									
Beryllium	ND	0.009									
Boron	0.1	0.1									
Copper	ND	0.2									
Iron	2	0.6									
Manganese	ND	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.2	0.09									

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 51** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25019** Method: **SW6010B**

Analysis Date: **06/25/14 19:20** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	258	5.0	250		103	80	120				
Barium	51.2	1.0	50		102	80	120				
Beryllium	24.6	1.0	25		98	80	120				
Boron	47.8	1.0	50	0.125	95	80	120				
Copper	51.2	1.0	50		102	80	120				
Iron	255	5.0	250	1.745	101	80	120				
Manganese	242	1.0	250		97	80	120				
Nickel	50.0	1.0	50		100	80	120				
Vanadium	49.5	1.0	50		99	80	120				
Zinc	46.9	1.0	50	0.2005	93	80	120				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140625A: 52** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6010B**

Analysis Date: **06/25/14 19:24** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13600	5.0	14700		93	50.7	131.3				
Barium	571	1.0	614		93	80.6	112.2				
Beryllium	44.7	1.0	51		88	76.3	108.6				
Boron	72.5	1.0	93.2	0.125	78	59.4	101.9				
Copper	261	1.1	280		93	77.5	109.6				
Iron	20300	5.0	23000	1.745	88	39.6	138.3				
Manganese	363	1.0	369		98	80.8	115.7				
Nickel	58.2	1.0	61		95	72.3	103.4				
Vanadium	64.9	1.0	73		89	66.6	107.3				
Zinc	193	1.0	213	0.2005	90	74.2	109.9				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 381** SampType: **Sample Matrix Spike** Lab ID: **H14060106-046BMS** Method: **SW6010B**

Analysis Date: **06/25/14 21:22** Units: **mg/kg-dry** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5840	5.0	279.5	4551		75	125				A
Barium	200	1.0	55.9	100	179	75	125				S
Beryllium	28.9	1.0	27.95	0.2594	102	75	125				
Boron	60.0	1.0	55.9	1.285	105	75	125				
Copper	94.6	1.2	55.9	14.74	143	75	125				S
Iron	6410	5.0	279.5	7063		75	125				A
Manganese	493	1.0	279.5	230.6	94	75	125				
Nickel	66.4	1.0	55.9	6.721	107	75	125				
Vanadium	71.6	1.0	55.9	13.91	103	75	125				
Zinc	154	1.0	55.9	137.7	29	75	125				S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140625A: 382** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-046BMSD** Method: **SW6010B**

Analysis Date: **06/25/14 21:26** Units: **mg/kg-dry** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6060	5.0	279.5	4551		75	125	5843	3.6	20	A
Barium	177	1.0	55.9	100	137	75	125	200.1	13	20	S
Beryllium	29.3	1.0	27.95	0.2594	104	75	125	28.85	1.7	20	
Boron	63.9	1.0	55.9	1.285	112	75	125	60.04	6.2	20	
Copper	71.3	1.2	55.9	14.74	101	75	125	94.63	28	20	R
Iron	6810	5.0	279.5	7063		75	125	6413	6.0	20	A
Manganese	509	1.0	279.5	230.6	100	75	125	492.7	3.2	20	
Nickel	68.5	1.0	55.9	6.721	110	75	125	66.4	3.1	20	
Vanadium	72.5	1.0	55.9	13.91	105	75	125	71.57	1.3	20	
Zinc	170	1.0	55.9	137.7	59	75	125	153.9	10	20	S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 264** SampType: **Sample Matrix Spike** Lab ID: **H14060106-046BMS** Method: **SW6010B**

Analysis Date: **06/25/14 02:10** Units: **mg/kg-dry** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5510	5.0	279.5	4476		75	125				A
Barium	194	1.0	55.9	99.27	169	75	125				S
Beryllium	27.6	1.0	27.95	0.2588	98	75	125				
Boron	52.1	1.0	55.9	1.194	91	75	125				
Copper	89.6	1.2	55.9	14.04	135	75	125				S
Iron	6070	5.0	279.5	7163		75	125				A
Manganese	461	1.0	279.5	228	83	75	125				
Nickel	61.1	1.0	55.9	5.795	99	75	125				
Vanadium	67.0	1.0	55.9	13.72	95	75	125				
Zinc	134	1.0	55.9	129.9	8	75	125				S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140624B: 265** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-046BMSD** Method: **SW6010B**

Analysis Date: **06/25/14 02:13** Units: **mg/kg-dry** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5560	5.0	279.5	4476		75	125	5512	0.8	20	A
Barium	164	1.0	55.9	99.27	116	75	125	193.5	17	20	
Beryllium	27.3	1.0	27.95	0.2588	97	75	125	27.56	0.9	20	
Boron	50.7	1.0	55.9	1.194	89	75	125	52.07	2.7	20	
Copper	66.3	1.2	55.9	14.04	94	75	125	89.57	30	20	R
Iron	6360	5.0	279.5	7163		75	125	6074	4.5	20	A
Manganese	470	1.0	279.5	228	86	75	125	460.8	1.9	20	
Nickel	60.5	1.0	55.9	5.795	98	75	125	61.08	0.9	20	
Vanadium	66.4	1.0	55.9	13.72	94	75	125	67.04	0.9	20	
Zinc	142	1.0	55.9	129.9	22	75	125	134.3	5.9	20	S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 54** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6020**

Analysis Date: **06/25/14 00:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	5	4									
Cadmium	ND	0.2									
Chromium	0.2	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Vanadium	ND	0.6									
Zinc	5	4									

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 55** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6020**

Analysis Date: **06/25/14 00:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	57.9	1.0	126		46	2.2	92.9				
Arsenic	338	1.0	343		99	72.3	106.4				
Boron	91.9	4.4	93.2	5.16	93	59.4	101.9				
Cadmium	135	1.0	137		99	73	105.1				
Chromium	83.3	1.0	76	0.2132	109	72.8	109.1				
Cobalt	58.0	1.0	57.4		101	73.3	103.7				
Lead	201	1.0	187		108	75.9	108.6				
Molybdenum	162	1.0	172		94	68.6	105.8				
Selenium	214	1.0	196		109	72.5	112.2				
Silver	68.6	1.0	69		99	67.8	112.8				
Uranium	127	1.0	100		127	80	120				S
Vanadium	75.0	1.0	73		103	66.6	107.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 55** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6020**
Analysis Date: **06/25/14 00:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	237	3.4	213	5.225	109	74.2	109.9				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 56** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25019** Method: **SW6020**
Analysis Date: **06/25/14 00:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.1	1.0	50		100	80	120				
Arsenic	51.2	1.0	50		102	80	120				
Boron	56.7	4.5	50	5.16	103	80	120				
Cadmium	25.8	1.0	25		103	80	120				
Chromium	52.5	1.0	50	0.2132	105	80	120				
Cobalt	49.7	1.0	50		99	80	120				
Lead	49.6	1.0	50		99	80	120				
Molybdenum	50.1	1.0	50		100	80	120				
Selenium	53.8	1.0	50		108	80	120				
Silver	24.2	1.0	25		97	80	120				
Uranium	47.9	1.0	50		96	80	120				
Vanadium	50.7	1.0	50		101	80	120				
Zinc	58.8	3.5	50	5.225	107	80	120				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 82** SampType: **Serial Dilution** Lab ID: **H14060106-046ADIL** Method: **SW6020**
Analysis Date: **06/25/14 02:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1283		10	
Arsenic	5.19	1.5				0	0	4.849		10	N
Boron	ND	21				0	0			10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 82** SampType: **Serial Dilution** Lab ID: **H14060106-046ADIL** Method: **SW6020**

Analysis Date: **06/25/14 02:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	1.0				0	0	0.3542		10	
Chromium	10.4	1.0				0	0	9.884	4.9	10	
Cobalt	2.24	1.0				0	0	2.183		10	N
Lead	7.43	1.1				0	0	7.318		10	N
Molybdenum	ND	1.0				0	0	0.2363		10	
Selenium	ND	1.7				0	0			10	
Silver	ND	1.3				0	0			10	
Uranium	0.943	1.0				0	0	0.95		10	N
Vanadium	11.2	3.0				0	0	11.3		10	N
Zinc	151	17				0	0	156.5		10	N

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 83** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-046APDS** Method: **SW6020**

Analysis Date: **06/25/14 02:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2200	1.0	2358	0.1283	93	75	125				
Arsenic	2260	1.0	2358	4.849	95	75	125				
Boron	2240	4.2	2358		95	75	125				
Cadmium	1090	1.0	1179	0.3542	92	75	125				
Chromium	2340	1.0	2358	9.884	99	75	125				
Cobalt	2150	1.0	2358	2.183	91	75	125				
Lead	2230	1.0	2358	7.318	94	75	125				
Molybdenum	2230	1.0	2358	0.2363	94	75	125				
Selenium	2210	1.0	2358		94	75	125				
Silver	603	1.0	1179		51	75	125				S
Uranium	2290	1.0	2358	0.95	97	75	125				
Vanadium	2330	1.0	2358	11.3	98	75	125				
Zinc	2290	3.3	2358	156.5	90	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 83** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-046APDS** Method: **SW6020**

Analysis Date: **06/25/14 02:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 84** SampType: **Sample Matrix Spike** Lab ID: **H14060106-046AMS** Method: **SW6020**

Analysis Date: **06/25/14 02:14** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	40.8	1.0	47.17	0.1283	86	75	125				
Arsenic	52.8	1.0	47.17	4.849	102	75	125				
Boron	76.8	4.2	47.17		163	75	125				S
Cadmium	25.0	1.0	23.58	0.3542	104	75	125				
Chromium	59.1	1.0	47.17	9.884	104	75	125				
Cobalt	50.2	1.0	47.17	2.183	102	75	125				
Lead	55.2	1.0	47.17	7.318	101	75	125				
Molybdenum	49.9	1.0	47.17	0.2363	105	75	125				
Selenium	52.2	1.0	47.17		111	75	125				
Silver	25.4	1.0	23.58		107	75	125				
Uranium	48.7	1.0	47.17	0.95	101	75	125				
Vanadium	58.6	1.0	47.17	11.3	100	75	125				
Zinc	136	3.3	47.17	156.5	-44	75	125				S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 85** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-046AMSD** Method: **SW6020**

Analysis Date: **06/25/14 02:18** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	37.0	1.0	47.17	0.1283	78	75	125	40.83	9.8	20	
Arsenic	52.9	1.0	47.17	4.849	102	75	125	52.81	0.2	20	
Boron	62.4	4.2	47.17		132	75	125	76.84	21	20	SR
Cadmium	24.9	1.0	23.58	0.3542	104	75	125	24.98	0.5	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 85** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-046AMSD** Method: **SW6020**

Analysis Date: **06/25/14 02:18** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	61.0	1.0	47.17	9.884	108	75	125	59.1	3.1	20	
Cobalt	49.6	1.0	47.17	2.183	100	75	125	50.19	1.2	20	
Lead	52.5	1.0	47.17	7.318	96	75	125	55.17	5.0	20	
Molybdenum	47.3	1.0	47.17	0.2363	100	75	125	49.91	5.3	20	
Selenium	51.8	1.0	47.17		110	75	125	52.24	0.9	20	
Silver	24.2	1.0	23.58		103	75	125	25.35	4.7	20	
Uranium	47.0	1.0	47.17	0.95	98	75	125	48.7	3.5	20	
Vanadium	59.5	1.0	47.17	11.3	102	75	125	58.58	1.6	20	
Zinc	147	3.3	47.17	156.5	-20	75	125	135.7	8.0	20	S

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140625A: 191** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6020**

Analysis Date: **06/26/14 01:07** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	0.5	0.3									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Vanadium	ND	0.6									
Zinc	5	4									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 191** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6020**
Analysis Date: **06/26/14 01:07** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140625A: 192** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6020**
Analysis Date: **06/26/14 01:12** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	55.0	1.0	126		44	2.2	92.9				
Arsenic	334	1.0	343	0.4515	97	72.3	106.4				
Boron	76.5	4.4	93.2		82	59.4	101.9				
Cadmium	131	1.0	137		96	73	105.1				
Chromium	79.7	1.0	76		105	72.8	109.1				
Cobalt	55.6	1.0	57.4		97	73.3	103.7				
Lead	195	1.0	187		104	75.9	108.6				
Molybdenum	159	1.0	172		93	68.6	105.8				
Selenium	200	1.0	196		102	72.5	112.2				
Silver	67.7	1.0	69		98	67.8	112.8				
Uranium	117	1.0	100		117	80	120				
Vanadium	72.1	1.0	73		99	66.6	107.3				
Zinc	225	3.4	213	4.52	104	74.2	109.9				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140626B: 61** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6020**
Analysis Date: **06/26/14 19:27** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	ND	4									
Cadmium	ND	0.2									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140626B: 61** SampType: **Method Blank** Lab ID: **MB-25019** Method: **SW6020**

Analysis Date: **06/26/14 19:27** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									
Vanadium	ND	0.6									
Zinc	5	4									

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140626B: 62** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6020**

Analysis Date: **06/26/14 19:31** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	55.8	1.0	126		44	2.2	92.9				
Arsenic	327	1.0	343		95	72.3	106.4				
Boron	83.9	4.4	93.2		90	59.4	101.9				
Cadmium	134	1.0	137		98	73	105.1				
Chromium	78.4	1.0	76		103	72.8	109.1				
Cobalt	56.5	1.0	57.4		98	73.3	103.7				
Lead	199	1.0	187		106	75.9	108.6				
Molybdenum	160	1.0	172		93	68.6	105.8				
Selenium	206	1.0	196		105	72.5	112.2				
Silver	69.0	1.0	69		100	67.8	112.8				
Uranium	121	1.0	100		121	80	120				S
Vanadium	71.1	1.0	73		97	66.6	107.3				
Zinc	227	3.4	213	4.792	104	74.2	109.9				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25019

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140626B: 62** SampType: **Laboratory Control Sample** Lab ID: **LCS-25019** Method: **SW6020**

Analysis Date: **06/26/14 19:31** Units: **mg/kg** **Prep Info:** Prep Date: **6/20/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25024

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 4** SampType: **Method Blank** Lab ID: **MB-25024** Method: **SW7471B**
Analysis Date: **06/24/14 10:17** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.002	0.0003									

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Run ID :Run Order: **HGCV201-H_140624A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-25024** Method: **SW7471B**
Analysis Date: **06/24/14 10:20** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.2	0.50	5	0.001828	104	80	120				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Run ID :Run Order: **HGCV201-H_140624A: 6** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25024** Method: **SW7471B**
Analysis Date: **06/24/14 10:22** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		104	80	120				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Run ID :Run Order: **HGCV201-H_140624A: 9** SampType: **Sample Matrix Spike** Lab ID: **H14060106-027AMS** Method: **SW7471B**
Analysis Date: **06/24/14 10:29** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.4	0.50	0.9921	0.3498	102	80	120				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25024

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 10** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-027AMSD** Method: **SW7471B**

Analysis Date: **06/24/14 10:32** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.994	0.3498	94	80	120	1.364	5.7	20	

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Run ID :Run Order: **HGCV201-H_140624A: 26** SampType: **Sample Matrix Spike** Lab ID: **H14060106-039AMS** Method: **SW7471B**

Analysis Date: **06/24/14 11:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9891	0.04077	104	80	120				

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Run ID :Run Order: **HGCV201-H_140624A: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-039AMSD** Method: **SW7471B**

Analysis Date: **06/24/14 11:12** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9901	0.04077	103	80	120	1.066	1.0	20	

Associated samples: **H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25025

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 35** SampType: **Method Blank** Lab ID: **MB-25025** Method: **SW7471B**
Analysis Date: **06/24/14 11:31** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.003	0.0003									

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 36** SampType: **Laboratory Control Sample** Lab ID: **LCS-25025** Method: **SW7471B**
Analysis Date: **06/24/14 11:34** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.0	0.50	5	0.002916	101	80	120				

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 37** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25025** Method: **SW7471B**
Analysis Date: **06/24/14 11:36** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		104	80	120				

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 41** SampType: **Sample Matrix Spike** Lab ID: **H14060106-046AMS** Method: **SW7471B**
Analysis Date: **06/24/14 11:46** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9862	0.01487	106	80	120				

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25025

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140624A: 42** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-046AMSD** Method: **SW7471B**
Analysis Date: **06/24/14 11:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9872	0.01487	113	80	120	1.056	6.8	20	

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 56** SampType: **Sample Matrix Spike** Lab ID: **H14060106-057AMS** Method: **SW7471B**
Analysis Date: **06/24/14 12:22** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.9814	0.1909	101	80	120				

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **HGCV201-H_140624A: 57** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-057AMSD** Method: **SW7471B**
Analysis Date: **06/24/14 12:24** Units: **mg/kg** **Prep Info:** Prep Date: **6/23/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.9785	0.1909	105	80	120	1.182	2.8	20	

Associated samples: **H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 110** SampType: **Method Blank** Lab ID: **MB-25047** Method: **SW6010B**

Analysis Date: **06/25/14 22:58** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.6	0.3									
Arsenic	ND	0.4									
Barium	0.05	0.02									
Beryllium	ND	0.009									
Cadmium	ND	0.01									
Chromium	ND	0.2									
Copper	ND	0.2									
Iron	10	0.6									
Lead	ND	0.6									
Manganese	0.03	0.02									
Nickel	0.09	0.07									
Vanadium	ND	0.1									
Zinc	0.3	0.09									

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICP2-HE_140625A: 111** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25047** Method: **SW6010B**

Analysis Date: **06/25/14 23:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	255	5.0	250	0.595	102	80	120				
Arsenic	48.7	1.0	50		97	80	120				
Barium	50.0	1.0	50	0.047	100	80	120				
Beryllium	24.4	1.0	25		98	80	120				
Cadmium	24.4	1.0	25		97	80	120				
Chromium	50.6	1.0	50		101	80	120				
Copper	49.7	1.0	50		99	80	120				
Iron	248	5.0	250	12.68	94	80	120				
Lead	47.4	1.0	50		95	80	120				
Manganese	236	1.0	250	0.0325	94	80	120				
Nickel	49.4	1.0	50	0.093	99	80	120				
Vanadium	48.5	1.0	50		97	80	120				
Zinc	50.5	1.0	50	0.3455	100	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 111** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25047** Method: **SW6010B**
Analysis Date: **06/25/14 23:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICP2-HE_140625A: 112** SampType: **Laboratory Control Sample** Lab ID: **LCS-25047** Method: **SW6010B**
Analysis Date: **06/25/14 23:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13400	5.0	14700	0.595	91	50.7	131.3				
Arsenic	297	1.8	343		86	72.3	106.4				
Barium	590	1.0	614	0.047	96	80.6	112.2				
Beryllium	46.1	1.0	51		90	76.3	108.6				
Cadmium	125	1.0	137		91	73	105.1				
Chromium	70.3	1.0	76		92	72.8	109.1				
Copper	267	1.1	280		96	77.5	109.6				
Iron	19300	5.0	23000	12.68	84	39.6	138.3				
Lead	187	3.2	187		100	75.9	108.6				
Manganese	355	1.0	369	0.0325	96	80.8	115.7				
Nickel	56.3	1.0	61	0.093	92	72.3	103.4				
Vanadium	63.7	1.0	73		87	66.6	107.3				
Zinc	204	1.0	213	0.3455	95	74.2	109.9				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICP2-HE_140625A: 125** SampType: **Serial Dilution** Lab ID: **H14060106-062ADIL** Method: **SW6010B**
Analysis Date: **06/25/14 23:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11400	16				0	0	10580	7.7	10	
Arsenic	11.7	8.6				0	0	18.33		10	N
Barium	92.7	1.0				0	0	86.2	7.2	10	
Beryllium	0.638	1.0				0	0	0.6262		10	N
Cadmium	1.57	1.0				0	0	1.553		10	N
Chromium	32.2	1.5				0	0	36.39	12	10	R
Copper	164	5.2				0	0	152.4	7.6	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 125** SampType: **Serial Dilution** Lab ID: **H14060106-062ADIL** Method: **SW6010B**

Analysis Date: **06/25/14 23:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	12800	14				0	0	11520	10	10	R
Lead	54.1	15				0	0	53.38		10	N
Manganese	704	1.0				0	0	639.7	9.6	10	
Nickel	20.8	1.7				0	0	18.78	10	10	R
Vanadium	32.9	3.5				0	0	29.53		10	N
Zinc	326	2.2				0	0	307.3	5.9	10	

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICP2-HE_140625A: 126** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-062APDS** Method: **SW6010B**

Analysis Date: **06/25/14 23:56** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11600	5.0	1226	10580		75	125				A
Arsenic	246	1.8	245.2	18.33	93	75	125				
Barium	310	1.0	245.2	86.2	91	75	125				
Beryllium	108	1.0	122.6	0.6262	88	75	125				
Cadmium	111	1.0	122.6	1.553	89	75	125				
Chromium	261	1.0	245.2	36.39	92	75	125				
Copper	379	1.1	245.2	152.4	92	75	125				
Iron	12500	5.0	1226	11520		75	125				A
Lead	277	3.1	245.2	53.38	91	75	125				
Manganese	1720	1.0	1226	639.7	88	75	125				
Nickel	243	1.0	245.2	18.78	91	75	125				
Vanadium	249	1.0	245.2	29.53	90	75	125				
Zinc	541	1.0	245.2	307.3	95	75	125				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICP2-HE_140625A: 127** SampType: **Sample Matrix Spike** Lab ID: **H14060106-062AMS** Method: **SW6010B**

Analysis Date: **06/26/14 00:00** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	14300	5.0	238.1	10580		75	125				A

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 127** SampType: **Sample Matrix Spike** Lab ID: **H14060106-062AMS** Method: **SW6010B**

Analysis Date: **06/26/14 00:00** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	66.6	1.7	47.62	18.33	101	75	125				
Barium	142	1.0	47.62	86.2	117	75	125				
Beryllium	23.3	1.0	23.81	0.6262	95	75	125				
Cadmium	24.6	1.0	23.81	1.553	97	75	125				
Chromium	88.8	1.0	47.62	36.39	110	75	125				
Copper	215	1.0	47.62	152.4	131	75	125				S
Iron	13700	5.0	238.1	11520		75	125				A
Lead	112	3.0	47.62	53.38	122	75	125				
Manganese	920	1.0	238.1	639.7	118	75	125				
Nickel	67.8	1.0	47.62	18.78	103	75	125				
Vanadium	81.6	1.0	47.62	29.53	109	75	125				
Zinc	400	1.0	47.62	307.3		75	125				A

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICP2-HE_140625A: 137** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-062AMSD** Method: **SW6010B**

Analysis Date: **06/26/14 00:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	14500	5.0	242.7	10580		75	125	14310	1.6	20	A
Arsenic	69.4	1.7	48.54	18.33	105	75	125	66.65	4.0	20	
Barium	145	1.0	48.54	86.2	121	75	125	142	1.9	20	
Beryllium	24.3	1.0	24.27	0.6262	97	75	125	23.33	4.0	20	
Cadmium	24.9	1.0	24.27	1.553	96	75	125	24.56	1.6	20	
Chromium	101	1.0	48.54	36.39	134	75	125	88.77	13	20	S
Copper	209	1.1	48.54	152.4	117	75	125	214.8	2.6	20	
Iron	14600	5.0	242.7	11520		75	125	13740	6.1	20	A
Lead	113	3.1	48.54	53.38	122	75	125	111.6	1.0	20	
Manganese	975	1.0	242.7	639.7	138	75	125	920.3	5.8	20	S
Nickel	73.8	1.0	48.54	18.78	113	75	125	67.8	8.5	20	
Vanadium	85.7	1.0	48.54	29.53	116	75	125	81.61	4.9	20	
Zinc	411	1.0	48.54	307.3		75	125	399.8	2.8	20	A

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 137** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-062AMSD** Method: **SW6010B**

Analysis Date: **06/26/14 00:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 75** SampType: **Method Blank** Lab ID: **MB-25047** Method: **SW6020**
Analysis Date: **06/25/14 16:19** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	ND	4									
Cobalt	ND	0.10									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICPMS204-B_140625A: 76** SampType: **Laboratory Control Sample** Lab ID: **LCS-25047** Method: **SW6020**
Analysis Date: **06/25/14 16:24** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.7	1.0	126		39	2.2	92.9				
Arsenic	325	1.0	343		95	72.3	106.4				
Boron	79.2	4.6	93.2		85	59.4	101.9				
Cobalt	55.5	1.0	57.4		97	73.3	103.7				
Molybdenum	153	1.0	172		89	68.6	105.8				
Selenium	199	1.0	196		101	72.5	112.2				
Silver	67.0	1.0	69		97	67.8	112.8				
Uranium	118	1.0	100		118	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICPMS204-B_140625A: 77** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25047** Method: **SW6020**
Analysis Date: **06/25/14 16:28** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.5	1.0	50		95	80	120				
Arsenic	50.9	1.0	50		102	80	120				
Boron	47.4	4.5	50		95	80	120				
Cobalt	47.6	1.0	50		95	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 77** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25047** Method: **SW6020**

Analysis Date: **06/25/14 16:28** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	48.6	1.0	50		97	80	120				
Selenium	51.4	1.0	50		103	80	120				
Silver	23.8	1.0	25		95	80	120				
Uranium	46.8	1.0	50		94	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICPMS204-B_140625A: 92** SampType: **Serial Dilution** Lab ID: **H14060106-062ADIL** Method: **SW6020**

Analysis Date: **06/25/14 17:34** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1479		10	
Arsenic	20.2	1.5				0	0	20.15	0.4	10	
Boron	ND	21				0	0			10	
Cobalt	3.93	1.0				0	0	4.357		10	N
Molybdenum	1.43	1.0				0	0	1.412		10	N
Selenium	ND	1.7				0	0	0.485		10	
Silver	ND	1.3				0	0	0.7605		10	
Uranium	7.14	1.0				0	0	7.581		10	N

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICPMS204-B_140625A: 93** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-062APDS** Method: **SW6020**

Analysis Date: **06/25/14 17:39** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2220	1.0	2381	0.1479	93	75	125				
Arsenic	2300	1.0	2381	20.15	96	75	125				
Boron	2170	4.3	2381		91	75	125				
Cobalt	2170	1.0	2381	4.357	91	75	125				
Molybdenum	2280	1.0	2381	1.412	96	75	125				
Selenium	2220	1.0	2381	0.485	93	75	125				
Silver	912	1.0	1190	0.7605	77	75	125				
Uranium	2300	1.0	2381	7.581	96	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25047

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 93** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-062APDS** Method: **SW6020**

Analysis Date: **06/25/14 17:39** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICPMS204-B_140625A: 94** SampType: **Sample Matrix Spike** Lab ID: **H14060106-062AMS** Method: **SW6020**

Analysis Date: **06/25/14 17:43** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.4	1.0	47.62	0.1479	38	75	125				S
Arsenic	72.2	1.0	47.62	20.15	109	75	125				
Boron	69.3	4.3	47.62		145	75	125				S
Cobalt	51.0	1.0	47.62	4.357	98	75	125				
Molybdenum	49.1	1.0	47.62	1.412	100	75	125				
Selenium	51.6	1.0	47.62	0.485	107	75	125				
Silver	26.1	1.0	23.81	0.7605	106	75	125				
Uranium	54.8	1.0	47.62	7.581	99	75	125				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Run ID :Run Order: **ICPMS204-B_140625A: 95** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-062AMSD** Method: **SW6020**

Analysis Date: **06/25/14 17:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	16.5	1.0	48.54	0.1479	34	75	125	18.4	11	20	S
Arsenic	71.6	1.0	48.54	20.15	106	75	125	72.19	0.8	20	
Boron	59.8	4.3	48.54		123	75	125	69.26	15	20	
Cobalt	52.4	1.0	48.54	4.357	99	75	125	51.05	2.6	20	
Molybdenum	48.9	1.0	48.54	1.412	98	75	125	49.12	0.5	20	
Selenium	50.4	1.0	48.54	0.485	103	75	125	51.57	2.2	20	
Silver	26.3	1.0	24.27	0.7605	105	75	125	26.1	0.7	20	
Uranium	56.1	1.0	48.54	7.581	100	75	125	54.79	2.4	20	

Associated samples: **H14060106-017A, H14060106-017B, H14060106-020A, H14060106-020B, H14060106-023A, H14060106-023B, H14060106-026A, H14060106-026B, H14060106-047A, H14060106-047B, H14060106-050A, H14060106-050B, H14060106-053A, H14060106-053B, H14060106-056A, H14060106-056B, H14060106-059A, H14060106-059B, H14060106-062A, H14060106-062B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 138** SampType: **Method Blank** Lab ID: **MB-25048** Method: **SW6010B**

Analysis Date: **06/26/14 00:41** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Arsenic	ND	0.4									
Barium	0.10	0.02									
Beryllium	ND	0.009									
Cadmium	ND	0.01									
Chromium	ND	0.06									
Copper	ND	0.2									
Iron	6	0.6									
Lead	ND	0.6									
Manganese	0.06	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	1.0	0.09									

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICP2-HE_140625A: 139** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25048** Method: **SW6010B**

Analysis Date: **06/26/14 00:45** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	248	5.0	250		99	80	120				
Arsenic	46.6	1.0	50		93	80	120				
Barium	49.9	1.0	50	0.096	100	80	120				
Beryllium	25.0	1.0	25		100	80	120				
Cadmium	22.5	1.0	25		90	80	120				
Chromium	50.8	1.0	50		102	80	120				
Copper	49.3	1.0	50		99	80	120				
Iron	249	5.0	250	6.109	97	80	120				
Lead	44.7	1.0	50		89	80	120				
Manganese	244	1.0	250	0.06	98	80	120				
Nickel	49.3	1.0	50		99	80	120				
Vanadium	50.3	1.0	50		101	80	120				
Zinc	47.1	1.0	50	0.974	92	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 139** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25048** Method: **SW6010B**
Analysis Date: **06/26/14 00:45** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICP2-HE_140625A: 140** SampType: **Laboratory Control Sample** Lab ID: **LCS-25048** Method: **SW6010B**
Analysis Date: **06/26/14 00:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13500	5.0	14700		92	50.7	131.3				
Arsenic	277	1.9	343		81	72.3	106.4				
Barium	565	1.0	614	0.096	92	80.6	112.2				
Beryllium	45.4	1.0	51		89	76.3	108.6				
Cadmium	116	1.0	137		84	73	105.1				
Chromium	71.6	1.0	76		94	72.8	109.1				
Copper	253	1.1	280		90	77.5	109.6				
Iron	19400	5.0	23000	6.109	84	39.6	138.3				
Lead	166	3.3	187		89	75.9	108.6				
Manganese	374	1.0	369	0.06	101	80.8	115.7				
Nickel	55.9	1.0	61		92	72.3	103.4				
Vanadium	64.9	1.0	73		89	66.6	107.3				
Zinc	188	1.0	213	0.974	88	74.2	109.9				

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICP2-HE_140625A: 153** SampType: **Serial Dilution** Lab ID: **H14060106-063ADIL** Method: **SW6010B**
Analysis Date: **06/26/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4040	16				0	0	4181	3.4	10	
Arsenic	9.24	8.5				0	0	12.11		10	N
Barium	87.4	1.0				0	0	88.44	1.1	10	
Beryllium	0.263	1.0				0	0	0.3024		10	N
Cadmium	0.521	1.0				0	0	0.4854		10	N
Chromium	5.54	1.5				0	0	8.952		10	N
Copper	54.0	5.2				0	0	52.11	3.5	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 153** SampType: **Serial Dilution** Lab ID: **H14060106-063ADIL** Method: **SW6010B**
Analysis Date: **06/26/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	9560	14				0	0	9852	3.0	10	
Lead	28.1	15				0	0	30.83		10	N
Manganese	351	1.0				0	0	365.6	4.1	10	
Nickel	4.51	1.7				0	0	4.309		10	N
Vanadium	27.5	3.5				0	0	27.67		10	N
Zinc	206	2.2				0	0	208.8	1.3	10	

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICP2-HE_140625A: 154** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-063APDS** Method: **SW6010B**
Analysis Date: **06/26/14 01:40** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5150	5.0	1215	4181	80	75	125				
Arsenic	215	1.8	242.9	12.11	84	75	125				
Barium	313	1.0	242.9	88.44	93	75	125				
Beryllium	110	1.0	121.5	0.3024	90	75	125				
Cadmium	97.1	1.0	121.5	0.4854	80	75	125				
Chromium	232	1.0	242.9	8.952	92	75	125				
Copper	275	1.1	242.9	52.11	92	75	125				
Iron	10000	5.0	1215	9852		75	125				A
Lead	222	3.1	242.9	30.83	79	75	125				
Manganese	1400	1.0	1215	365.6	85	75	125				
Nickel	218	1.0	242.9	4.309	88	75	125				
Vanadium	247	1.0	242.9	27.67	90	75	125				
Zinc	393	1.0	242.9	208.8	76	75	125				

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICP2-HE_140625A: 155** SampType: **Sample Matrix Spike** Lab ID: **H14060106-063AMS** Method: **SW6010B**
Analysis Date: **06/26/14 01:44** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5110	5.0	240.4	4181		75	125				A

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 155** SampType: **Sample Matrix Spike** Lab ID: **H14060106-063AMS** Method: **SW6010B**

Analysis Date: **06/26/14 01:44** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	58.9	1.7	48.08	12.11	97	75	125				
Barium	135	1.0	48.08	88.44	97	75	125				
Beryllium	23.5	1.0	24.04	0.3024	96	75	125				
Cadmium	21.2	1.0	24.04	0.4854	86	75	125				
Chromium	56.2	1.0	48.08	8.952	98	75	125				
Copper	103	1.1	48.08	52.11	107	75	125				
Iron	9760	5.0	240.4	9852		75	125				A
Lead	71.5	3.1	48.08	30.83	85	75	125				
Manganese	518	1.0	240.4	365.6	63	75	125				S
Nickel	50.0	1.0	48.08	4.309	95	75	125				
Vanadium	73.7	1.0	48.08	27.67	96	75	125				
Zinc	221	1.0	48.08	208.8		75	125				A

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICP2-HE_140625A: 156** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-063AMSD** Method: **SW6010B**

Analysis Date: **06/26/14 01:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5210	5.0	238.1	4181		75	125	5113	1.9	20	A
Arsenic	58.0	1.7	47.62	12.11	96	75	125	58.87	1.5	20	
Barium	137	1.0	47.62	88.44	101	75	125	134.9	1.4	20	
Beryllium	23.8	1.0	23.81	0.3024	99	75	125	23.46	1.3	20	
Cadmium	21.1	1.0	23.81	0.4854	87	75	125	21.16	0.2	20	
Chromium	54.0	1.0	47.62	8.952	95	75	125	56.23	4.0	20	
Copper	113	1.0	47.62	52.11	129	75	125	103.4	9.3	20	S
Iron	9670	5.0	238.1	9852		75	125	9763	1.0	20	A
Lead	68.3	3.0	47.62	30.83	79	75	125	71.54	4.6	20	
Manganese	510	1.0	238.1	365.6	60	75	125	518	1.6	20	S
Nickel	49.0	1.0	47.62	4.309	94	75	125	50.02	2.0	20	
Vanadium	73.2	1.0	47.62	27.67	96	75	125	73.7	0.7	20	
Zinc	235	1.0	47.62	208.8		75	125	221.4	5.9	20	A

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 156** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-063AMSD** Method: **SW6010B**

Analysis Date: **06/26/14 01:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 134** SampType: **Method Blank** Lab ID: **MB-25048** Method: **SW6020**

Analysis Date: **06/25/14 20:55** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	0.6	0.3									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICPMS204-B_140625A: 135** SampType: **Laboratory Control Sample** Lab ID: **LCS-25048** Method: **SW6020**

Analysis Date: **06/25/14 21:00** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.9	1.0	126		36	2.2	92.9				
Arsenic	314	1.0	343	0.6012	91	72.3	106.4				
Boron	71.3	4.7	93.2		76	59.4	101.9				
Cadmium	129	1.0	137		94	73	105.1				
Chromium	74.0	1.0	76		97	72.8	109.1				
Cobalt	54.7	1.0	57.4		95	73.3	103.7				
Lead	190	1.0	187		102	75.9	108.6				
Molybdenum	153	1.0	172		89	68.6	105.8				
Selenium	188	1.0	196		96	72.5	112.2				
Silver	65.6	1.0	69		95	67.8	112.8				
Uranium	112	1.0	100		112	80	120				

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 136** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25048** Method: **SW6020**

Analysis Date: **06/25/14 21:04** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.9	1.0	50		96	80	120				
Arsenic	49.4	1.0	50	0.6012	98	80	120				
Boron	41.2	4.5	50		82	80	120				
Cadmium	25.3	1.0	25		101	80	120				
Chromium	48.1	1.0	50		96	80	120				
Cobalt	47.0	1.0	50		94	80	120				
Lead	48.1	1.0	50		96	80	120				
Molybdenum	48.4	1.0	50		97	80	120				
Selenium	49.3	1.0	50		99	80	120				
Silver	23.8	1.0	25		95	80	120				
Uranium	44.9	1.0	50		90	80	120				

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICPMS204-B_140625A: 151** SampType: **Serial Dilution** Lab ID: **H14060106-063ADIL** Method: **SW6020**

Analysis Date: **06/25/14 22:11** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0			10	
Arsenic	14.9	1.5				0	0	14.17		10	N
Boron	ND	21				0	0			10	
Cadmium	ND	1.0				0	0	0.6241		10	
Chromium	9.67	1.0				0	0	10.22	5.6	10	
Cobalt	2.36	1.0				0	0	2.696		10	N
Lead	33.6	1.1				0	0	34.03	1.3	10	
Molybdenum	ND	1.0				0	0	0.5038		10	
Selenium	ND	1.7				0	0			10	
Silver	ND	1.3				0	0	0.3981		10	
Uranium	1.65	1.0				0	0	1.823		10	N

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 152** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-063APDS** Method: **SW6020**

Analysis Date: **06/25/14 22:15** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2170	1.0	2358		92	75	125				
Arsenic	2260	1.0	2358	14.17	95	75	125				
Boron	2050	4.2	2358		87	75	125				
Cadmium	1090	1.0	1179	0.6241	92	75	125				
Chromium	2230	1.0	2358	10.22	94	75	125				
Cobalt	2060	1.0	2358	2.696	87	75	125				
Lead	2220	1.0	2358	34.03	93	75	125				
Molybdenum	2210	1.0	2358	0.5038	94	75	125				
Selenium	2130	1.0	2358		90	75	125				
Silver	917	1.0	1179	0.3981	78	75	125				
Uranium	2220	1.0	2358	1.823	94	75	125				

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICPMS204-B_140625A: 153** SampType: **Sample Matrix Spike** Lab ID: **H14060106-063AMS** Method: **SW6020**

Analysis Date: **06/25/14 22:19** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	31.1	1.0	48.08		65	75	125				S
Arsenic	66.7	1.0	48.08	14.17	109	75	125				
Boron	59.3	4.3	48.08		123	75	125				
Cadmium	25.0	1.0	24.04	0.6241	102	75	125				
Chromium	57.4	1.0	48.08	10.22	98	75	125				
Cobalt	48.5	1.0	48.08	2.696	95	75	125				
Lead	82.5	1.0	48.08	34.03	101	75	125				
Molybdenum	48.2	1.0	48.08	0.5038	99	75	125				
Selenium	49.7	1.0	48.08		103	75	125				
Silver	26.6	1.0	24.04	0.3981	109	75	125				
Uranium	46.8	1.0	48.08	1.823	94	75	125				

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25048

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 154** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-063AMSD** Method: **SW6020**

Analysis Date: **06/25/14 22:23** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	29.7	1.0	47.62		62	75	125	31.13	4.8	20	S
Arsenic	66.4	1.0	47.62	14.17	110	75	125	66.71	0.5	20	
Boron	49.0	4.3	47.62		103	75	125	59.28	19	20	
Cadmium	24.8	1.0	23.81	0.6241	101	75	125	25.02	1.0	20	
Chromium	56.7	1.0	47.62	10.22	98	75	125	57.36	1.2	20	
Cobalt	48.0	1.0	47.62	2.696	95	75	125	48.51	1.1	20	
Lead	77.8	1.0	47.62	34.03	92	75	125	82.48	5.8	20	
Molybdenum	46.4	1.0	47.62	0.5038	96	75	125	48.22	3.8	20	
Selenium	48.0	1.0	47.62		101	75	125	49.71	3.5	20	
Silver	26.2	1.0	23.81	0.3981	109	75	125	26.56	1.2	20	
Uranium	46.5	1.0	47.62	1.823	94	75	125	46.83	0.7	20	

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Run ID :Run Order: **ICPMS204-B_140626B: 77** SampType: **Method Blank** Lab ID: **MB-25048** Method: **SW6020**

Analysis Date: **06/26/14 20:45** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	0.4	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14060106-018A, H14060106-018B, H14060106-021A, H14060106-021B, H14060106-024A, H14060106-024B, H14060106-027A, H14060106-027B, H14060106-048A, H14060106-048B, H14060106-051A, H14060106-051B, H14060106-054A, H14060106-054B, H14060106-057A, H14060106-057B, H14060106-060A, H14060106-060B, H14060106-063A, H14060106-063B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 157** SampType: **Method Blank** Lab ID: **MB-25049** Method: **SW6010B**
Analysis Date: **06/26/14 01:51** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.03	0.02									
Beryllium	ND	0.009									
Cadmium	0.02	0.01									
Chromium	ND	0.06									
Iron	10	0.6									
Manganese	0.05	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 158** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25049** Method: **SW6010B**
Analysis Date: **06/26/14 01:55** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	245	5.0	250		98	80	120				
Barium	49.0	1.0	50	0.0315	98	80	120				
Beryllium	24.8	1.0	25		99	80	120				
Cadmium	22.6	1.0	25	0.0165	90	80	120				
Chromium	50.7	1.0	50		101	80	120				
Iron	252	5.0	250	12.58	96	80	120				
Manganese	242	1.0	250	0.051	97	80	120				
Nickel	49.6	1.0	50		99	80	120				
Vanadium	49.7	1.0	50		99	80	120				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 161** SampType: **Laboratory Control Sample** Lab ID: **LCS-25049** Method: **SW6010B**
Analysis Date: **06/26/14 02:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12700	5.0	14700		87	50.7	131.3				
Barium	562	1.0	614	0.0315	92	80.6	112.2				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 161** SampType: **Laboratory Control Sample** Lab ID: **LCS-25049** Method: **SW6010B**

Analysis Date: **06/26/14 02:06** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	46.1	1.0	51		90	76.3	108.6				
Cadmium	113	1.0	137	0.0165	83	73	105.1				
Chromium	69.0	1.0	76		91	72.8	109.1				
Iron	19000	5.0	23000	12.58	82	39.6	138.3				
Manganese	352	1.0	369	0.051	95	80.8	115.7				
Nickel	54.6	1.0	61		90	72.3	103.4				
Vanadium	63.6	1.0	73		87	66.6	107.3				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 174** SampType: **Serial Dilution** Lab ID: **H14060106-064ADIL** Method: **SW6010B**

Analysis Date: **06/26/14 02:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3110	16				0	0	3079	1.1	10	
Barium	72.8	1.0				0	0	71.46	1.9	10	
Beryllium	0.305	1.0				0	0	0.2063		10	N
Cadmium	ND	1.0				0	0	0.3048		10	
Chromium	2.98	1.5				0	0	5.991		10	N
Iron	6690	14				0	0	6425	4.1	10	
Manganese	231	1.0				0	0	225	2.8	10	
Nickel	4.84	1.7				0	0	3.784		10	N
Vanadium	14.0	3.6				0	0	15.67		10	N

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 175** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6010B**

Analysis Date: **06/26/14 02:58** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4220	5.0	1238	3079	92	75	125				
Barium	300	1.0	247.6	71.46	92	75	125				
Beryllium	115	1.0	123.8	0.2063	92	75	125				
Cadmium	101	1.0	123.8	0.3048	81	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 175** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6010B**

Analysis Date: **06/26/14 02:58** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	233	1.0	247.6	5.991	92	75	125				
Iron	7460	5.0	1238	6425		75	125				A
Manganese	1330	1.0	1238	225	89	75	125				
Nickel	224	1.0	247.6	3.784	89	75	125				
Vanadium	245	1.0	247.6	15.67	92	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 176** SampType: **Sample Matrix Spike** Lab ID: **H14060106-064AMS** Method: **SW6010B**

Analysis Date: **06/26/14 03:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4150	5.0	238.1	3079		75	125				A
Barium	120	1.0	47.62	71.46	101	75	125				
Beryllium	23.4	1.0	23.81	0.2063	97	75	125				
Cadmium	21.6	1.0	23.81	0.3048	90	75	125				
Chromium	55.0	1.0	47.62	5.991	103	75	125				
Iron	5580	5.0	238.1	6425		75	125				A
Manganese	400	1.0	238.1	225	73	75	125				S
Nickel	51.0	1.0	47.62	3.784	99	75	125				
Vanadium	60.7	1.0	47.62	15.67	95	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 177** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6010B**

Analysis Date: **06/26/14 03:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4400	5.0	240.4	3079		75	125	4150	5.9	20	A
Barium	137	1.0	48.08	71.46	136	75	125	119.5	13	20	S
Beryllium	25.0	1.0	24.04	0.2063	103	75	125	23.37	6.6	20	
Cadmium	24.9	1.0	24.04	0.3048	102	75	125	21.62	14	20	
Chromium	61.8	1.0	48.08	5.991	116	75	125	55.01	12	20	
Iron	6190	5.0	240.4	6425		75	125	5584	10	20	A

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 177** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6010B**

Analysis Date: **06/26/14 03:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	457	1.0	240.4	225	97	75	125	399.7	13	20	
Nickel	57.0	1.0	48.08	3.784	111	75	125	51	11	20	
Vanadium	63.4	1.0	48.08	15.67	99	75	125	60.7	4.4	20	

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 158** SampType: **Method Blank** Lab ID: **MB-25049** Method: **SW6020**
Analysis Date: **06/25/14 22:41** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.2	0.1									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 159** SampType: **Laboratory Control Sample** Lab ID: **LCS-25049** Method: **SW6020**
Analysis Date: **06/25/14 22:46** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.3	1.0	126	0.1682	37	2.2	92.9				
Boron	75.7	4.6	93.2		81	59.4	101.9				
Cadmium	133	1.0	137		97	73	105.1				
Chromium	78.0	1.0	76		103	72.8	109.1				
Cobalt	54.6	1.0	57.4		95	73.3	103.7				
Molybdenum	155	1.0	172		90	68.6	105.8				
Selenium	205	1.0	196		104	72.5	112.2				
Silver	67.0	1.0	69		97	67.8	112.8				
Uranium	117	1.0	100		117	80	120				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 160** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25049** Method: **SW6020**
Analysis Date: **06/25/14 22:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.2	1.0	50	0.1682	96	80	120				
Boron	46.0	4.5	50		92	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 160** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25049** Method: **SW6020**
Analysis Date: **06/25/14 22:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	25.7	1.0	25		103	80	120				
Chromium	48.9	1.0	50		98	80	120				
Cobalt	47.3	1.0	50		95	80	120				
Molybdenum	48.4	1.0	50		97	80	120				
Selenium	49.0	1.0	50		98	80	120				
Silver	23.9	1.0	25		96	80	120				
Uranium	46.4	1.0	50		93	80	120				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 175** SampType: **Serial Dilution** Lab ID: **H14060106-064ADIL** Method: **SW6020**
Analysis Date: **06/25/14 23:57** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0			10	
Boron	ND	22				0	0			10	
Cadmium	ND	1.0				0	0	0.3796		10	
Chromium	6.97	1.0				0	0	7.216		10	N
Cobalt	1.68	1.0				0	0	1.992		10	N
Molybdenum	ND	1.0				0	0	0.4726		10	
Selenium	ND	1.7				0	0			10	
Silver	ND	1.3				0	0			10	
Uranium	1.44	1.0				0	0	1.518		10	N

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 176** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6020**
Analysis Date: **06/26/14 00:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2240	1.0	2404		93	75	125				
Boron	2120	4.3	2404		88	75	125				
Cadmium	1110	1.0	1202	0.3796	92	75	125				
Chromium	2270	1.0	2404	7.216	94	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 176** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6020**

Analysis Date: **06/26/14 00:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	2140	1.0	2404	1.992	89	75	125				
Molybdenum	2290	1.0	2404	0.4726	95	75	125				
Selenium	2140	1.0	2404		89	75	125				
Silver	965	1.0	1202		80	75	125				
Uranium	2280	1.0	2404	1.518	95	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 177** SampType: **Sample Matrix Spike** Lab ID: **H14060106-064AMS** Method: **SW6020**

Analysis Date: **06/26/14 00:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	37.2	1.0	47.62		78	75	125				
Boron	60.6	4.3	47.62		127	75	125				S
Cadmium	24.4	1.0	23.81	0.3796	101	75	125				
Chromium	55.8	1.0	47.62	7.216	102	75	125				
Cobalt	47.6	1.0	47.62	1.992	96	75	125				
Molybdenum	48.1	1.0	47.62	0.4726	100	75	125				
Selenium	48.8	1.0	47.62		103	75	125				
Silver	26.1	1.0	23.81		110	75	125				
Uranium	46.0	1.0	47.62	1.518	93	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 178** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6020**

Analysis Date: **06/26/14 00:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	35.9	1.0	48.08		75	75	125	37.21	3.5	20	
Boron	53.2	4.3	48.08		111	75	125	60.64	13	20	
Cadmium	26.2	1.0	24.04	0.3796	107	75	125	24.36	7.3	20	
Chromium	58.2	1.0	48.08	7.216	106	75	125	55.76	4.2	20	
Cobalt	49.5	1.0	48.08	1.992	99	75	125	47.64	3.8	20	
Molybdenum	48.4	1.0	48.08	0.4726	100	75	125	48.14	0.5	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25049

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 178** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6020**

Analysis Date: **06/26/14 00:10** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	50.7	1.0	48.08		106	75	125	48.83	3.8	20	
Silver	25.6	1.0	24.04		106	75	125	26.12	2.2	20	
Uranium	48.0	1.0	48.08	1.518	97	75	125	45.98	4.3	20	

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140626B: 82** SampType: **Method Blank** Lab ID: **MB-25049** Method: **SW6020**

Analysis Date: **06/26/14 21:07** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	0.7	0.2									
Cobalt	ND	0.10									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25053

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140626A: 4** SampType: **Method Blank** Lab ID: **MB-25053** Method: **SW7471B**
Analysis Date: **06/26/14 13:49** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.007	0.0003									

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-25053** Method: **SW7471B**
Analysis Date: **06/26/14 13:51** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.9	0.50	5	0.006911	98	80	120				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 6** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25053** Method: **SW7471B**
Analysis Date: **06/26/14 13:53** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1		104	80	120				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 8** SampType: **Sample Matrix Spike** Lab ID: **H14060106-054AMS** Method: **SW7471B**
Analysis Date: **06/26/14 13:58** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.9901	0.1634	111	80	120				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 9** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-054AMSD** Method: **SW7471B**
Analysis Date: **06/26/14 14:01** Units: **mg/kg** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1.01	0.1634	92	80	120	1.262	15	20	

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **HGCV201-H_140626A: 25** SampType: **Sample Matrix Spike** Lab ID: **H14060245-012AMS** Method: **SW7471B**
Analysis Date: **06/26/14 14:39** Units: **mg/kg-dry** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1.016	0.02128	102	80	120				

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25053

Date: *14-Jul-14*

Run ID :Run Order: **HGCV201-H_140626A: 26** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060245-012AMSD** Method: **SW7471B**

Analysis Date: **06/26/14 14:41** Units: **mg/kg-dry** **Prep Info:** Prep Date: **6/24/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1.006	0.02128	**103**	80	120	1.061	**0.0**	20	

Associated samples: **H14060106-054A, H14060106-054B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25135

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 476** SampType: **Method Blank** Lab ID: **MB-25135** Method: **SW6010B**
Analysis Date: **07/03/14 21:00** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4	0.4									
Barium	0.09	0.02									
Copper	ND	0.2									
Iron	4	0.6									
Lead	ND	0.6									
Zinc	0.3	0.09									

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140702A: 477** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25135** Method: **SW6010B**
Analysis Date: **07/03/14 21:04** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.5	1.0	50	0.4205	102	80	120				
Barium	48.2	1.0	50	0.0885	96	80	120				
Copper	47.9	1.0	50		96	80	120				
Iron	251	5.0	250	3.574	99	80	120				
Lead	54.0	1.0	50		108	80	120				
Zinc	51.6	1.0	50	0.3285	102	80	120				

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140702A: 478** SampType: **Laboratory Control Sample** Lab ID: **LCS-25135** Method: **SW6010B**
Analysis Date: **07/03/14 21:08** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	290	1.8	350	0.4205	83	72.3	106.4				
Barium	512	1.0	626.5	0.0885	82	80.6	112.2				
Copper	231	1.1	285.7		81	77.5	109.6				
Iron	18700	5.0	23470	3.574	80	39.6	138.3				
Lead	193	3.2	190.8		101	75.9	108.6				
Zinc	195	1.0	217.3	0.3285	90	74.2	109.9				

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25135

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 491** SampType: **Serial Dilution** Lab ID: **H14060106-064ADIL** Method: **SW6010B**

Analysis Date: **07/03/14 21:56** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	8.6				0	0	7.126		10	
Barium	63.5	1.0				0	0	63.06	0.7	10	
Copper	31.1	5.2				0	0	30.32		10	N
Iron	4760	14				0	0	4858	1.9	10	
Lead	20.4	15				0	0	14		10	N
Zinc	79.1	2.2				0	0	83.29	5.2	10	

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140702A: 492** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6010B**

Analysis Date: **07/03/14 22:00** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	252	1.8	245.2	7.126	100	75	125				
Barium	297	1.0	245.2	63.06	95	75	125				
Copper	263	1.1	245.2	30.32	95	75	125				
Iron	5850	5.0	1226	4858	81	75	125				
Lead	258	3.1	245.2	14	100	75	125				
Zinc	331	1.0	245.2	83.29	101	75	125				

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140702A: 493** SampType: **Sample Matrix Spike** Lab ID: **H14060106-064AMS** Method: **SW6010B**

Analysis Date: **07/03/14 22:03** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	56.9	1.7	47.62	7.126	105	75	125				
Barium	140	1.0	47.62	63.06	162	75	125				S
Copper	91.4	1.0	47.62	30.32	128	75	125				S
Iron	6740	5.0	238.1	4858		75	125				A
Lead	70.4	3.0	47.62	14	118	75	125				
Zinc	163	1.0	47.62	83.29	166	75	125				S

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25135

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 496** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6010B**
Analysis Date: **07/03/14 22:14** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	54.1	1.7	48.08	7.126	98	75	125	56.93	5.0	20	
Barium	148	1.0	48.08	63.06	178	75	125	140	5.8	20	S
Copper	90.2	1.1	48.08	30.32	124	75	125	91.43	1.4	20	
Iron	6860	5.0	240.4	4858		75	125	6740	1.8	20	A
Lead	80.2	3.1	48.08	14	138	75	125	70.42	13	20	S
Zinc	190	1.0	48.08	83.29	222	75	125	162.5	16	20	S

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 47** SampType: **Method Blank** Lab ID: **MB-25135** Method: **SW6010B**
Analysis Date: **07/08/14 13:26** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									
Barium	0.10	0.02									
Copper	ND	0.2									
Iron	3	0.6									
Lead	ND	0.6									
Zinc	0.3	0.09									

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 50** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25135** Method: **SW6010B**
Analysis Date: **07/08/14 13:37** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	44.4	1.0	50		89	80	120				
Barium	50.5	1.0	50	0.095	101	80	120				
Copper	49.9	1.0	50		100	80	120				
Iron	243	5.0	250	3.052	96	80	120				
Lead	44.6	1.0	50		89	80	120				
Zinc	47.0	1.0	50	0.2785	93	80	120				

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25135

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140708B: 71** SampType: **Serial Dilution** Lab ID: **H14060106-064ADIL** Method: **SW6010B**

Analysis Date: **07/08/14 14:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	8.6				0	0	4.316		10	
Barium	67.5	1.0				0	0	63.23	6.5	10	
Copper	32.8	5.2				0	0	29.6		10	N
Iron	5410	14				0	0	4970	8.5	10	
Lead	ND	15				0	0	10.3		10	
Zinc	69.7	2.2				0	0	66.35	4.9	10	

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 72** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6010B**

Analysis Date: **07/08/14 14:58** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	236	1.8	245.2	4.316	94	75	125				
Barium	292	1.0	245.2	63.23	93	75	125				
Copper	270	1.1	245.2	29.6	98	75	125				
Iron	6350	5.0	1226	4970		75	125				A
Lead	239	3.1	245.2	10.3	93	75	125				
Zinc	308	1.0	245.2	66.35	98	75	125				

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 73** SampType: **Sample Matrix Spike** Lab ID: **H14060106-064AMS** Method: **SW6010B**

Analysis Date: **07/08/14 15:02** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.2	1.7	47.62	4.316	94	75	125				
Barium	141	1.0	47.62	63.23	164	75	125				S
Copper	97.1	1.0	47.62	29.6	142	75	125				S
Iron	7380	5.0	238.1	4970		75	125				A
Lead	58.4	3.0	47.62	10.3	101	75	125				
Zinc	138	1.0	47.62	66.35	151	75	125				S

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25135

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140708B: 74** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6010B**

Analysis Date: **07/08/14 15:05** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.4	1.7	48.08	4.316	96	75	125	49.17	2.5	20	
Barium	155	1.0	48.08	63.23	190	75	125	141.3	9.1	20	S
Copper	96.6	1.1	48.08	29.6	139	75	125	97.13	0.5	20	S
Iron	7320	5.0	240.4	4970		75	125	7379	0.8	20	A
Lead	67.9	3.1	48.08	10.3	120	75	125	58.37	15	20	
Zinc	177	1.0	48.08	66.35	231	75	125	138.3	25	20	SR

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 111** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25135** Method: **SW6010B**

Analysis Date: **07/08/14 17:22** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	47.8	1.0	50		96	80	120				
Barium	48.1	1.0	50	0.095	96	80	120				
Copper	47.6	1.0	50		95	80	120				
Iron	238	5.0	250	3.052	94	80	120				
Lead	49.3	1.0	50		99	80	120				
Zinc	48.9	1.0	50	0.2785	97	80	120				

Associated samples: **H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 169** SampType: **Method Blank** Lab ID: **MB-25136** Method: **SW6010B**

Analysis Date: **07/02/14 00:14** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									
Barium	ND	0.02									
Chromium	ND	0.06									
Copper	ND	0.2									
Iron	3	0.6									
Lead	ND	0.6									
Manganese	0.02	0.02									
Nickel	ND	0.07									
Vanadium	0.2	0.1									
Zinc	4	0.09									

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140701B: 170** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25136** Method: **SW6010B**

Analysis Date: **07/02/14 00:18** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.0	1.0	50		102	80	120				
Barium	49.5	1.0	50		99	80	120				
Chromium	50.6	1.0	50		101	80	120				
Copper	49.1	1.0	50		98	80	120				
Iron	260	5.0	250	2.94	103	80	120				
Lead	50.8	1.0	50		102	80	120				
Manganese	249	1.0	250	0.02	100	80	120				
Nickel	51.6	1.0	50		103	80	120				
Vanadium	50.2	1.0	50	0.204	100	80	120				
Zinc	51.6	1.0	50	3.902	95	80	120				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 171** SampType: **Laboratory Control Sample** Lab ID: **LCS-25136** Method: **SW6010B**

Analysis Date: **07/02/14 00:21** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	294	1.7	343		86	72.3	106.4				
Barium	563	1.0	614		92	80.6	112.2				
Chromium	69.7	1.0	76		92	72.8	109.1				
Copper	251	1.1	280		90	77.5	109.6				
Iron	20000	5.0	23000	2.94	87	39.6	138.3				
Lead	179	3.1	187		96	75.9	108.6				
Manganese	361	1.0	369	0.02	98	80.8	115.7				
Nickel	56.6	1.0	61		93	72.3	103.4				
Vanadium	64.4	1.0	73	0.204	88	66.6	107.3				
Zinc	196	1.0	213	3.902	90	74.2	109.9				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140701B: 191** SampType: **Serial Dilution** Lab ID: **H14060106-064ADIL** Method: **SW6010B**

Analysis Date: **07/02/14 01:36** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	25.8	9.4				0	0	13.73		10	N
Barium	89.2	1.0				0	0	87.69	1.7	10	
Chromium	4.11	1.6				0	0	7.09		10	N
Copper	57.4	5.7				0	0	56.57		10	N
Iron	7120	15				0	0	6894	3.2	10	
Lead	20.3	17				0	0	22.7		10	N
Manganese	256	1.0				0	0	250	2.3	10	
Nickel	3.10	1.8				0	0	4.278		10	N
Vanadium	18.1	3.9				0	0	15.61		10	N
Zinc	107	2.4				0	0	103.6	3.7	10	

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 194** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6010B**

Analysis Date: **07/02/14 01:47** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	275	1.9	268.2	13.73	97	75	125				
Barium	333	1.0	268.2	87.69	92	75	125				
Chromium	260	1.0	268.2	7.09	94	75	125				
Copper	304	1.2	268.2	56.57	92	75	125				
Iron	8330	5.0	1341	6894		75	125				A
Lead	288	3.4	268.2	22.7	99	75	125				
Manganese	1540	1.0	1341	250	96	75	125				
Nickel	262	1.0	268.2	4.278	96	75	125				
Vanadium	273	1.0	268.2	15.61	96	75	125				
Zinc	363	1.0	268.2	103.6	97	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140701B: 195** SampType: **Sample Matrix Spike** Lab ID: **H14060106-064AMS** Method: **SW6010B**

Analysis Date: **07/02/14 01:50** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	68.0	1.9	53.19	13.73	102	75	125				
Barium	130	1.0	53.19	87.69	79	75	125				
Chromium	61.6	1.0	53.19	7.09	102	75	125				
Copper	89.9	1.2	53.19	56.57	63	75	125				S
Iron	6550	5.0	266	6894		75	125				A
Lead	83.6	3.4	53.19	22.7	114	75	125				
Manganese	560	1.0	266	250	116	75	125				
Nickel	59.9	1.0	53.19	4.278	104	75	125				
Vanadium	70.3	1.0	53.19	15.61	103	75	125				
Zinc	175	1.0	53.19	103.6	134	75	125				S

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 196** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6010B**

Analysis Date: **07/02/14 01:54** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	64.8	1.9	52.08	13.73	98	75	125	68.05	4.9	20	
Barium	141	1.0	52.08	87.69	102	75	125	129.6	8.2	20	
Chromium	58.3	1.0	52.08	7.09	98	75	125	61.56	5.5	20	
Copper	91.6	1.1	52.08	56.57	67	75	125	89.86	2.0	20	S
Iron	6720	5.0	260.4	6894		75	125	6550	2.5	20	A
Lead	81.5	3.3	52.08	22.7	113	75	125	83.59	2.5	20	
Manganese	495	1.0	260.4	250	94	75	125	559.7	12	20	
Nickel	56.7	1.0	52.08	4.278	101	75	125	59.86	5.4	20	
Vanadium	70.3	1.0	52.08	15.61	105	75	125	70.29	0.0	20	
Zinc	154	1.0	52.08	103.6	97	75	125	174.8	13	20	

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140702A: 188** SampType: **Method Blank** Lab ID: **MB-25136** Method: **SW6010B**

Analysis Date: **07/03/14 01:11** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.4									
Barium	ND	0.02									
Chromium	ND	0.06									
Copper	ND	0.2									
Iron	2	0.6									
Lead	ND	0.6									
Manganese	0.03	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	3	0.09									

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 191** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-25136** Method: **SW6010B**

Analysis Date: **07/03/14 01:22** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	45.5	1.0	50		91	80	120				
Barium	52.1	1.0	50		104	80	120				
Chromium	47.2	1.0	50		94	80	120				
Copper	50.7	1.0	50		101	80	120				
Iron	243	5.0	250	2.381	96	80	120				
Lead	43.6	1.0	50		87	80	120				
Manganese	241	1.0	250	0.034	96	80	120				
Nickel	46.3	1.0	50		93	80	120				
Vanadium	49.2	1.0	50		98	80	120				
Zinc	46.0	1.0	50	3.45	85	80	120				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140702A: 192** SampType: **Laboratory Control Sample** Lab ID: **LCS-25136** Method: **SW6010B**

Analysis Date: **07/03/14 01:26** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	253	1.7	343		74	72.3	106.4				
Barium	576	1.0	614		94	80.6	112.2				
Chromium	62.1	1.0	76		82	72.8	109.1				
Copper	254	1.1	280		91	77.5	109.6				
Iron	18600	5.0	23000	2.381	81	39.6	138.3				
Lead	153	3.1	187		82	75.9	108.6				
Manganese	347	1.0	369	0.034	94	80.8	115.7				
Nickel	48.9	1.0	61		80	72.3	103.4				
Vanadium	63.7	1.0	73		87	66.6	107.3				
Zinc	169	1.0	213	3.45	78	74.2	109.9				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 212** SampType: **Serial Dilution** Lab ID: **H14060106-064ADIL** Method: **SW6010B**

Analysis Date: **07/03/14 02:40** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	9.4				0	0	11.16		10	
Barium	92.6	1.0				0	0	89.77	3.1	10	
Chromium	5.27	1.6				0	0	7.395		10	N
Copper	58.7	5.7				0	0	57.15		10	N
Iron	7460	15				0	0	7154	4.2	10	
Lead	ND	17				0	0	17.59		10	
Manganese	256	1.0				0	0	247.8	3.3	10	
Nickel	4.60	1.8				0	0	4.83		10	N
Vanadium	16.8	3.9				0	0	16.32		10	N
Zinc	109	2.4				0	0	104.7	4.0	10	

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140702A: 213** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14060106-064APDS** Method: **SW6010B**

Analysis Date: **07/03/14 02:44** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	260	1.9	268.2	11.16	93	75	125				
Barium	347	1.0	268.2	89.77	96	75	125				
Chromium	258	1.0	268.2	7.395	93	75	125				
Copper	312	1.2	268.2	57.15	95	75	125				
Iron	8250	5.0	1341	7154		75	125				A
Lead	261	3.4	268.2	17.59	91	75	125				
Manganese	1470	1.0	1341	247.8	91	75	125				
Nickel	255	1.0	268.2	4.83	93	75	125				
Vanadium	267	1.0	268.2	16.32	93	75	125				
Zinc	353	1.0	268.2	104.7	93	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 25136

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 214** SampType: **Sample Matrix Spike** Lab ID: **H14060106-064AMS** Method: **SW6010B**

Analysis Date: **07/03/14 02:48** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	62.9	1.9	53.19	11.16	97	75	125				
Barium	133	1.0	53.19	89.77	82	75	125				
Chromium	60.9	1.0	53.19	7.395	101	75	125				
Copper	90.0	1.2	53.19	57.15	62	75	125				S
Iron	6560	5.0	266	7154		75	125				A
Lead	71.2	3.4	53.19	17.59	101	75	125				
Manganese	536	1.0	266	247.8	109	75	125				
Nickel	58.1	1.0	53.19	4.83	100	75	125				
Vanadium	69.3	1.0	53.19	16.32	100	75	125				
Zinc	167	1.0	53.19	104.7	117	75	125				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140702A: 215** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-064AMSD** Method: **SW6010B**

Analysis Date: **07/03/14 02:51** Units: **mg/kg** **Prep Info:** Prep Date: **6/30/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	58.1	1.9	52.08	11.16	90	75	125	62.85	7.9	20	
Barium	142	1.0	52.08	89.77	101	75	125	133.4	6.5	20	
Chromium	58.7	1.0	52.08	7.395	98	75	125	60.93	3.8	20	
Copper	89.5	1.1	52.08	57.15	62	75	125	89.95	0.5	20	S
Iron	6620	5.0	260.4	7154		75	125	6562	0.8	20	A
Lead	69.2	3.3	52.08	17.59	99	75	125	71.2	2.8	20	
Manganese	467	1.0	260.4	247.8	84	75	125	536.4	14	20	
Nickel	55.5	1.0	52.08	4.83	97	75	125	58.07	4.5	20	
Vanadium	67.7	1.0	52.08	16.32	99	75	125	69.28	2.2	20	
Zinc	151	1.0	52.08	104.7	88	75	125	167.1	10	20	

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97712

Date: *14-Jul-14*

Run ID :Run Order: **PHSC_101-H_140605A: 68** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **06/05/14 10:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2	0.9									

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 70** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **06/05/14 11:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	590	4.0	600	2.45	97	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 73** SampType: **Sample Duplicate** Lab ID: **H14050430-003ADUP** Method: **A2320 B**
Analysis Date: **06/05/14 11:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2.4	4.0						2.35		10	
Bicarbonate as HCO3	2.3	4.0						2.257		10	

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 77** SampType: **Sample Matrix Spike** Lab ID: **H14060078-001AMS** Method: **A2320 B**
Analysis Date: **06/05/14 11:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	770	4.0	600	193	97	80	120				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 112** SampType: **Sample Duplicate** Lab ID: **H14060106-007ADUP** Method: **A2320 B**
Analysis Date: **06/05/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	93	4.0						92.45	0.2	10	
Bicarbonate as HCO3	110	4.0						112.2	0.2	10	

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97712

Date: *14-Jul-14*

Run ID :Run Order: **PHSC_101-H_140605A: 116** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**

Analysis Date: **06/05/14 14:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	4	0.9									

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 118** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**

Analysis Date: **06/05/14 14:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	590	4.0	600	4.05	97	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 121** SampType: **Sample Duplicate** Lab ID: **H14060106-009ADUP** Method: **A2320 B**

Analysis Date: **06/05/14 15:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	90	4.0						90.8	0.4	10	
Bicarbonate as HCO3	110	4.0						110.2	0.4	10	

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Run ID :Run Order: **PHSC_101-H_140605A: 125** SampType: **Sample Matrix Spike** Lab ID: **H14060106-010AMS** Method: **A2320 B**

Analysis Date: **06/05/14 15:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	680	4.0	600	90	99	80	120				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97740

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140605B: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **06/05/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.994	0.010	1		99	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **06/05/14 12:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.952	0.011	1		95	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **06/05/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	-0.00565	0.010				0	0				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **06/05/14 12:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	ND	0.001									

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 55** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **06/05/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.472	0.010	0.5		94	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97740

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140605B: 57** SampType: **Sample Matrix Spike** Lab ID: **H14060106-001DMS** Method: **E353.2**
Analysis Date: **06/05/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.17	0.011	1	0.2417	93	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 58** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-001DMSD** Method: **E353.2**
Analysis Date: **06/05/14 13:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.19	0.011	1	0.2417	95	90	110	1.169	1.9	20	

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 69** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **06/05/14 13:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.470	0.010	0.5		94	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 71** SampType: **Sample Matrix Spike** Lab ID: **H14060106-011DMS** Method: **E353.2**
Analysis Date: **06/05/14 13:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.93	0.011	1	1.016	91	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140605B: 72** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-011DMSD** Method: **E353.2**
Analysis Date: **06/05/14 13:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.94	0.011	1	1.016	93	90	110	1.926	0.9	20	

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97750

Date: *14-Jul-14*

Run ID :Run Order: **PHSC_101-H_140606A: 6** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **06/06/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2	0.9									

Associated samples: **H14060106-016A**

Run ID :Run Order: **PHSC_101-H_140606A: 8** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **06/06/14 11:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	580	4.0	600	2.4	97	90	110				

Associated samples: **H14060106-016A**

Run ID :Run Order: **PHSC_101-H_140606A: 11** SampType: **Sample Matrix Spike** Lab ID: **H14060106-016AMS** Method: **A2320 B**
Analysis Date: **06/06/14 12:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	670	4.0	600	77.65	99	80	120				

Associated samples: **H14060106-016A**

Run ID :Run Order: **PHSC_101-H_140606A: 14** SampType: **Sample Duplicate** Lab ID: **H14060107-003BDUP** Method: **A2320 B**
Analysis Date: **06/06/14 12:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	140	4.0						136.8	0.7	10	
Bicarbonate as HCO3	170	4.0						166.2	0.7	10	

Associated samples: **H14060106-016A**

Run ID :Run Order: **PHSC_101-H_140606A: 42** SampType: **Sample Duplicate** Lab ID: **H14060159-015ADUP** Method: **A2320 B**
Analysis Date: **06/06/14 14:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	120	4.0						122.6	1.1	10	
Bicarbonate as HCO3	150	4.0						149	1.1	10	

Associated samples: **H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97753

Date: *14-Jul-14*

Run ID :Run Order: **IC102-H_140605A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **06/05/14 14:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		105	90	110				
Sulfate	420	1.0	400		106	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **06/05/14 14:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	0.02	0.008									
Sulfate	ND	0.08									

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **06/05/14 14:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	46	1.0	50	0.022	92	90	110				
Sulfate	190	1.0	200		96	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 16** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV060514-1** Method: **E300.0**
Analysis Date: **06/05/14 15:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	420	1.0	400		106	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 19** SampType: **Sample Matrix Spike** Lab ID: **H14060104-001AMS** Method: **E300.0**
Analysis Date: **06/05/14 15:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	58	1.0	50	9.446	98	90	110				
Sulfate	220	1.0	200	19.87	103	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97753

Date: *14-Jul-14*

Run ID :Run Order: **IC102-H_140605A: 19** SampType: **Sample Matrix Spike** Lab ID: **H14060104-001AMS** Method: **E300.0**
Analysis Date: **06/05/14 15:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 20** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060104-001AMSD** Method: **E300.0**
Analysis Date: **06/05/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	59	1.0	50	9.446	99	90	110	58.42	0.9	20	
Sulfate	230	1.0	200	19.87	103	90	110	224.9	0.6	20	

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 30** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV060514-2** Method: **E300.0**
Analysis Date: **06/05/14 17:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		108	90	110				
Sulfate	430	1.0	400		106	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14060106-005AMS** Method: **E300.0**
Analysis Date: **06/05/14 18:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	70	1.0	50	15.8	107	90	110				
Sulfate	270	1.0	200	50.38	112	90	110				S

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Run ID :Run Order: **IC102-H_140605A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-005AMSD** Method: **E300.0**
Analysis Date: **06/05/14 18:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	70	1.0	50	15.8	108	90	110	69.54	0.0	20	
Sulfate	280	1.0	200	50.38	113	90	110	273.9	0.7	20	S

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97753

Date: *14-Jul-14*

Run ID :Run Order: **IC102-H_140605A: 44** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV060514-3** Method: **E300.0**

Analysis Date: **06/05/14 20:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		109	90	110				
Sulfate	430	1.0	400		107	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/05/14 12:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.791	0.10	0.8		99	95	105				
Potassium	40.2	1.0	40		100	95	105				
Sodium	40.5	1.0	40		101	95	105				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **06/05/14 12:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.43	0.10	2.5		97	95	105				
Potassium	24.7	1.0	25		99	95	105				
Sodium	24.9	1.0	25		99	95	105				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/05/14 12:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.000910	0.10				0	0				
Potassium	-0.0615	1.0				0	0				
Sodium	0.0160	1.0				0	0				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/05/14 12:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.991	0.10	1		99	80	120				
Potassium	20.1	1.0	20		100	80	120				
Sodium	20.2	1.0	20		101	80	120				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**
Analysis Date: **06/05/14 12:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**
Analysis Date: **06/05/14 12:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.945	0.10	1		95	85	115				
Potassium	47.6	1.0	50		95	85	115				
Sodium	48.0	1.0	50		96	85	115				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 30** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **06/05/14 15:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.50	0.10	2.5		100	90	110				
Potassium	24.5	1.0	25		98	90	110				
Sodium	24.6	1.0	25		98	90	110				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 32** SampType: **Sample Matrix Spike** Lab ID: **H14060078-001BMS2** Method: **E200.7**
Analysis Date: **06/05/14 15:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.12	0.050	1	0.1186	100	70	130				
Potassium	56.8	1.0	50	7.011	100	70	130				
Sodium	73.0	1.0	50	22.9	100	70	130				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060078-001BMSD2** Method: **E200.7**

Analysis Date: **06/05/14 15:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.06	0.050	1	0.1186	94	70	130	1.121	5.9	20	
Potassium	56.8	1.0	50	7.011	99	70	130	56.81	0.1	20	
Sodium	73.2	1.0	50	22.9	100	70	130	73.02	0.2	20	

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 49** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **06/05/14 16:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.49	0.10	2.5		100	90	110				
Potassium	24.5	1.0	25		98	90	110				
Sodium	24.5	1.0	25		98	90	110				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 54** SampType: **Sample Matrix Spike** Lab ID: **H14060106-003BMS2** Method: **E200.7**

Analysis Date: **06/05/14 16:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.05	0.050	1	0.04729	100	70	130				
Potassium	53.6	1.0	50	4.084	99	70	130				
Sodium	66.1	1.0	50	16.99	98	70	130				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 55** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-003BMSD2** Method: **E200.7**

Analysis Date: **06/05/14 16:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.06	0.050	1	0.04729	101	70	130	1.051	0.6	20	
Potassium	53.8	1.0	50	4.084	100	70	130	53.64	0.4	20	
Sodium	66.5	1.0	50	16.99	99	70	130	66.07	0.6	20	

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97754

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140605C: 61** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **06/05/14 17:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.50	0.10	2.5		100	90	110				
Potassium	24.6	1.0	25		99	90	110				
Sodium	24.6	1.0	25		98	90	110				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 69** SampType: **Sample Matrix Spike** Lab ID: **H14060106-013BMS2** Method: **E200.7**
Analysis Date: **06/05/14 17:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.02	0.050	1	0.01692	100	70	130				
Potassium	53.6	1.0	50	2.402	102	70	130				
Sodium	63.4	1.0	50	11.6	104	70	130				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 70** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-013BMSD2** Method: **E200.7**
Analysis Date: **06/05/14 17:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.00	0.050	1	0.01692	98	70	130	1.019	1.8	20	
Potassium	53.9	1.0	50	2.402	103	70	130	53.64	0.6	20	
Sodium	63.7	1.0	50	11.6	104	70	130	63.42	0.4	20	

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICP2-HE_140605C: 73** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **06/05/14 17:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.45	0.10	2.5		98	90	110				
Potassium	24.7	1.0	25		99	90	110				
Sodium	24.6	1.0	25		98	90	110				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97792

Date: *14-Jul-14*

Run ID :Run Order: **FIA202-HE_140606A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**
Analysis Date: **06/06/14 10:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.256	0.010	0.25		103	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **06/06/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0910	0.010	0.1		91	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**
Analysis Date: **06/06/14 10:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-0.000970	0.010				0	0				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 29** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **06/06/14 11:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0957	0.010	0.1		96	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA202-HE_140606A: 46** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **06/06/14 11:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0913	0.010	0.1		91	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97804

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140606E: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **06/06/14 14:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	15.1	0.50	15.2		99	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **06/06/14 14:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.997	0.055	1		100	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **06/06/14 14:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0517	0.050				0	0				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 23** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **06/06/14 15:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.463	0.050	0.5		93	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 26** SampType: **Sample Matrix Spike** Lab ID: **H14060105-003DMS** Method: **E350.1**
Analysis Date: **06/06/14 15:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.900	0.055	1		90	80	120				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97804

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140606E: 27** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060105-003DMSD** Method: **E350.1**
Analysis Date: **06/06/14 15:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.930	0.055	1		93	80	120	0.8996	3.3	10	

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 37** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **06/06/14 15:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.464	0.050	0.5		93	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 40** SampType: **Sample Matrix Spike** Lab ID: **H14060106-008DMS** Method: **E350.1**
Analysis Date: **06/06/14 15:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.955	0.055	1		96	80	120				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-008DMSD** Method: **E350.1**
Analysis Date: **06/06/14 15:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.990	0.055	1		99	80	120	0.9552	3.6	10	

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **06/06/14 15:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.463	0.050	0.5		93	90	110				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97804

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140606E: 54** SampType: **Sample Matrix Spike** Lab ID: **H14060161-001CMS** Method: **E350.1**

Analysis Date: **06/06/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	6.09	0.28	5	1.168	98	80	120				

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Run ID :Run Order: **FIA203-HE_140606E: 55** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060161-001CMSD** Method: **E350.1**

Analysis Date: **06/06/14 15:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	6.10	0.28	5	1.168	99	80	120	6.088	0.2	10	

Associated samples: **H14060106-001D, H14060106-002D, H14060106-003D, H14060106-004D, H14060106-005D, H14060106-006D, H14060106-007D, H14060106-008D, H14060106-009D, H14060106-010D, H14060106-011D, H14060106-012D, H14060106-013D, H14060106-014D, H14060106-015D, H14060106-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97833

Date: *14-Jul-14*

Run ID :Run Order: **IC102-H_140606A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **06/06/14 15:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		105	90	110				
Sulfate	420	1.0	400		105	90	110				

Associated samples: **H14060106-005A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **IC102-H_140606A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **06/06/14 15:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	0.03	0.008									
Sulfate	ND	0.08									

Associated samples: **H14060106-005A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **IC102-H_140606A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **06/06/14 15:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	46	1.0	50	0.03	92	90	110				
Sulfate	190	1.0	200		96	90	110				

Associated samples: **H14060106-005A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **IC102-H_140606A: 16** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV060614-1** Method: **E300.0**
Analysis Date: **06/06/14 16:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	110	1.0	100		108	90	110				
Sulfate	420	1.0	400		105	90	110				

Associated samples: **H14060106-005A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **IC102-H_140606A: 19** SampType: **Sample Matrix Spike** Lab ID: **H14060106-005AMS** Method: **E300.0**
Analysis Date: **06/06/14 16:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	65	1.0	50	15.53	100	90	110				
Sulfate	260	1.0	200	50.02	104	90	110				

Associated samples: **H14060106-005A, H14060106-015A, H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97833

Date: *14-Jul-14*

Run ID :Run Order: **IC102-H_140606A: 20** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-005AMSD** Method: **E300.0**

Analysis Date: **06/06/14 16:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	66	1.0	50	15.53	**101**	90	110	65.37	**0.7**	20	
Sulfate	260	1.0	200	50.02	**104**	90	110	258.3	**0.0**	20	

Associated samples: **H14060106-005A, H14060106-015A, H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97845

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140609B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **06/09/14 12:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0392	0.10				0	0				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Run ID :Run Order: **FIA203-HE_140609B: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **06/09/14 12:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.520	0.10	0.5		104	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Run ID :Run Order: **FIA203-HE_140609B: 35** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **06/09/14 13:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.512	0.10	0.5		102	90	110				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97852

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140609A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/09/14 10:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.10	0.10	4		102	95	105				
Boron	0.811	0.10	0.8		101	95	105				
Calcium	40.2	1.0	40		100	95	105				
Iron	3.99	0.020	4		100	95	105				
Magnesium	40.9	1.0	40		102	95	105				
Potassium	40.3	1.0	40		101	95	105				
Sodium	40.5	1.0	40		101	95	105				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **06/09/14 10:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.57	0.10	2.5		103	95	105				
Boron	2.53	0.10	2.5		101	95	105				
Calcium	24.9	1.0	25		100	95	105				
Iron	2.48	0.020	2.5		99	95	105				
Magnesium	25.0	1.0	25		100	95	105				
Potassium	25.6	1.0	25		102	95	105				
Sodium	25.7	1.0	25		103	95	105				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/09/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	518	0.10	500		104	80	120				
Boron	0.00436	0.10				0	0				
Calcium	455	1.0	500		91	80	120				
Iron	182	0.020	200		91	80	120				
Magnesium	501	1.0	500		100	80	120				
Potassium	-0.0762	1.0				0	0				
Sodium	0.0366	1.0				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97852

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140609A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **06/09/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **06/09/14 10:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	523	0.10	500		105	80	120				
Boron	0.991	0.10	1		99	80	120				
Calcium	449	1.0	500		90	80	120				
Iron	181	0.020	200		90	80	120				
Magnesium	498	1.0	500		100	80	120				
Potassium	20.4	1.0	20		102	80	120				
Sodium	20.6	1.0	20		103	80	120				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **06/09/14 11:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.55	0.10	2.5		102	90	110				
Boron	2.55	0.10	2.5		102	90	110				
Calcium	23.8	1.0	25		95	90	110				
Iron	2.42	0.020	2.5		97	90	110				
Magnesium	23.1	1.0	25		92	90	110				
Potassium	24.8	1.0	25		99	90	110				
Sodium	25.1	1.0	25		100	90	110				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **06/09/14 12:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.56	0.10	2.5		103	90	110				
Boron	2.60	0.10	2.5		104	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97852

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140609A: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **06/09/14 12:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	24.7	1.0	25		99	90	110				
Iron	2.48	0.020	2.5		99	90	110				
Magnesium	24.4	1.0	25		98	90	110				
Potassium	25.3	1.0	25		101	90	110				
Sodium	25.5	1.0	25		102	90	110				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Run ID :Run Order: **ICP2-HE_140609A: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **06/09/14 12:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.57	0.10	2.5		103	90	110				
Boron	2.51	0.10	2.5		100	90	110				
Calcium	24.5	1.0	25		98	90	110				
Iron	2.47	0.020	2.5		99	90	110				
Magnesium	24.1	1.0	25		96	90	110				
Potassium	25.0	1.0	25		100	90	110				
Sodium	25.2	1.0	25		101	90	110				

Associated samples: **H14060106-001C, H14060106-002C, H14060106-003C, H14060106-004C, H14060106-005C, H14060106-006C, H14060106-007C, H14060106-008C, H14060106-009C, H14060106-010C, H14060106-011C, H14060106-012C, H14060106-013C, H14060106-014C, H14060106-015C, H14060106-016C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97938

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140612A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.476	0.10	0.5		95	90	110				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A**

Run ID :Run Order: **FIA203-HE_140612A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0496	0.10				0	0				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A**

Run ID :Run Order: **FIA203-HE_140612A: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **06/11/14 16:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.449	0.10	0.5		90	90	110				

Associated samples: **H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R97945

Date: *14-Jul-14*

Run ID :Run Order: **FIA203-HE_140612B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **06/12/14 10:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.518	0.10	0.5		**104**	90	110				

Associated samples: **H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **FIA203-HE_140612B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **06/12/14 10:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0318	0.10				0	0				

Associated samples: **H14060106-014A, H14060106-015A, H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **06/11/14 16:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.315	0.10	0.3		105	90	110				
Antimony	0.0600	0.050	0.06		100	90	110				
Arsenic	0.0605	0.0050	0.06		101	90	110				
Barium	0.0610	0.10	0.06		102	90	110				
Beryllium	0.0308	0.0010	0.03		103	90	110				
Cadmium	0.0323	0.0010	0.03		108	90	110				
Chromium	0.0606	0.010	0.06		101	90	110				
Cobalt	0.0596	0.010	0.06		99	90	110				
Copper	0.0619	0.010	0.06		103	90	110				
Iron	0.304	0.020	0.3		101	90	110				
Lead	0.0607	0.010	0.06		101	90	110				
Manganese	0.304	0.010	0.3		101	90	110				
Molybdenum	0.0614	0.0050	0.06		102	90	110				
Nickel	0.0617	0.010	0.06		103	90	110				
Selenium	0.0604	0.0050	0.06		101	90	110				
Silver	0.0307	0.0050	0.03		102	90	110				
Uranium	0.0607	0.0010	0.06		101	90	110				
Vanadium	0.0595	0.10	0.06		99	90	110				
Zinc	0.0619	0.010	0.06		103	90	110				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/11/14 16:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	39.5	0.10	40		99	70	130				
Antimony	9.80E-05	0.050									
Arsenic	0.000187	0.0050									
Barium	0.000147	0.10									
Beryllium	3.50E-05	0.0010									
Cadmium	0.000327	0.0010									
Chromium	0.00105	0.010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/11/14 16:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.000205	0.010									
Copper	0.000347	0.010									
Iron	95.2	0.020	100		95	70	130				
Lead	0.000246	0.010									
Manganese	0.000138	0.010									
Molybdenum	0.843	0.0050	0.8		105	70	130				
Nickel	0.000571	0.010									
Selenium	0.000672	0.0050									
Silver	0.000318	0.0050									
Uranium	5.30E-05	0.0010									
Vanadium	5.30E-05	0.10									
Zinc	0.00144	0.010									

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/11/14 16:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	40.3	0.10	40		101	70	130				
Antimony	0.000141	0.050				0	0				
Arsenic	0.0108	0.0050	0.01		108	70	130				
Barium	0.000175	0.10				0	0				
Beryllium	1.60E-05	0.0010				0	0				
Cadmium	0.00930	0.0010	0.01		93	70	130				
Chromium	0.0216	0.010	0.02		108	70	130				
Cobalt	0.0189	0.010	0.02		95	70	130				
Copper	0.0205	0.010	0.02		102	70	130				
Iron	96.8	0.020	100		97	70	130				
Lead	0.000343	0.010				0	0				
Manganese	0.0191	0.010	0.02		96	70	130				
Molybdenum	0.837	0.0050	0.8		105	70	130				
Nickel	0.0208	0.010	0.02		104	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/11/14 16:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.0102	0.0050	0.01		102	70	130				
Silver	0.0182	0.0050	0.02		91	70	130				
Uranium	7.20E-05	0.0010				0	0				
Vanadium	0.0205	0.10	0.02		103	70	130				
Zinc	0.0112	0.010	0.01		112	70	130				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 31** SampType: **Sample Matrix Spike** Lab ID: **H14060106-001BMS** Method: **E200.8**

Analysis Date: **06/11/14 19:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0520	0.030	0.05	0.001911	100	70	130				
Antimony	0.0515	0.0010	0.05	0.0003372	102	70	130				
Arsenic	0.0622	0.0010	0.05	0.008128	108	70	130				
Barium	0.0810	0.050	0.05	0.03031	101	70	130				
Beryllium	0.0515	0.0010	0.05		103	70	130				
Cadmium	0.0514	0.0010	0.05	0.0000355	103	70	130				
Chromium	0.0520	0.0050	0.05	0.0001473	104	70	130				
Cobalt	0.0500	0.0050	0.05	0.0001256	100	70	130				
Copper	0.0610	0.0050	0.05	0.006878	108	70	130				
Iron	0.366	0.020	0.15	0.2162	100	70	130				
Lead	0.0518	0.0010	0.05	0.0004199	103	70	130				
Manganese	0.0943	0.0010	0.05	0.04272	103	70	130				
Molybdenum	0.0562	0.0010	0.05	0.005394	102	70	130				
Nickel	0.0535	0.0050	0.05	0.0003635	106	70	130				
Selenium	0.0541	0.0010	0.05	0.0001426	108	70	130				
Silver	0.0183	0.0010	0.02		91	70	130				
Uranium	0.0530	0.00030	0.05	0.00237	101	70	130				
Vanadium	0.0538	0.010	0.05	0.002272	103	70	130				
Zinc	0.0606	0.010	0.05	0.006706	108	70	130				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-001BMSD** Method: **E200.8**

Analysis Date: **06/11/14 19:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0499	0.030	0.05	0.001911	96	70	130	0.05202	4.2	20	
Antimony	0.0505	0.0010	0.05	0.0003372	100	70	130	0.0515	2.0	20	
Arsenic	0.0611	0.0010	0.05	0.008128	106	70	130	0.06225	1.9	20	
Barium	0.0787	0.050	0.05	0.03031	97	70	130	0.08104	3.0	20	
Beryllium	0.0495	0.0010	0.05		99	70	130	0.05153	4.0	20	
Cadmium	0.0499	0.0010	0.05	0.0000355	100	70	130	0.0514	3.0	20	
Chromium	0.0508	0.0050	0.05	0.0001473	101	70	130	0.05201	2.4	20	
Cobalt	0.0490	0.0050	0.05	0.0001256	98	70	130	0.05004	2.2	20	
Copper	0.0590	0.0050	0.05	0.006878	104	70	130	0.06105	3.3	20	
Iron	0.361	0.020	0.15	0.2162	97	70	130	0.3658	1.2	20	
Lead	0.0500	0.0010	0.05	0.0004199	99	70	130	0.05181	3.6	20	
Manganese	0.0936	0.0010	0.05	0.04272	102	70	130	0.09434	0.8	20	
Molybdenum	0.0552	0.0010	0.05	0.005394	100	70	130	0.05622	1.8	20	
Nickel	0.0518	0.0050	0.05	0.0003635	103	70	130	0.0535	3.2	20	
Selenium	0.0537	0.0010	0.05	0.0001426	107	70	130	0.05409	0.7	20	
Silver	0.0178	0.0010	0.02		89	70	130	0.01829	2.5	20	
Uranium	0.0510	0.00030	0.05	0.00237	97	70	130	0.05298	3.7	20	
Vanadium	0.0528	0.010	0.05	0.002272	101	70	130	0.05378	1.9	20	
Zinc	0.0587	0.010	0.05	0.006706	104	70	130	0.06065	3.3	20	

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140611B: 68** SampType: **Sample Matrix Spike** Lab ID: **H14060106-011BMS** Method: **E200.8**

Analysis Date: **06/11/14 22:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0534	0.030	0.05	0.004106	99	70	130				
Antimony	0.0506	0.0010	0.05	0.0003982	100	70	130				
Arsenic	0.0674	0.0010	0.05	0.01323	108	70	130				
Barium	0.0836	0.050	0.05	0.0338	100	70	130				
Beryllium	0.0508	0.0010	0.05		101	70	130				
Cadmium	0.0498	0.0010	0.05	0.0000779	99	70	130				
Chromium	0.0519	0.0050	0.05	0.0001288	104	70	130				
Cobalt	0.0479	0.0050	0.05	0.0002546	95	70	130				
Copper	0.0637	0.0050	0.05	0.01109	105	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 68** SampType: **Sample Matrix Spike** Lab ID: **H14060106-011BMS** Method: **E200.8**

Analysis Date: **06/11/14 22:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	0.283	0.020	0.15	0.1343	99	70	130				
Lead	0.0508	0.0010	0.05	0.0004822	101	70	130				
Manganese	0.164	0.0010	0.05	0.1176	92	70	130				
Molybdenum	0.0548	0.0010	0.05	0.004426	101	70	130				
Nickel	0.0531	0.0050	0.05	0.0008607	104	70	130				
Selenium	0.0537	0.0010	0.05	0.0001865	107	70	130				
Silver	0.0175	0.0010	0.02		87	70	130				
Uranium	0.0529	0.00030	0.05	0.003265	99	70	130				
Vanadium	0.0540	0.010	0.05	0.002446	103	70	130				
Zinc	0.0703	0.010	0.05	0.01687	107	70	130				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140611B: 69** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-011BMSD** Method: **E200.8**

Analysis Date: **06/11/14 22:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0535	0.030	0.05	0.004106	99	70	130	0.05342	0.2	20	
Antimony	0.0506	0.0010	0.05	0.0003982	100	70	130	0.05056	0.2	20	
Arsenic	0.0669	0.0010	0.05	0.01323	107	70	130	0.0674	0.8	20	
Barium	0.0822	0.050	0.05	0.0338	97	70	130	0.08361	1.7	20	
Beryllium	0.0510	0.0010	0.05		102	70	130	0.05075	0.5	20	
Cadmium	0.0500	0.0010	0.05	0.0000779	100	70	130	0.04976	0.4	20	
Chromium	0.0513	0.0050	0.05	0.0001288	102	70	130	0.0519	1.1	20	
Cobalt	0.0482	0.0050	0.05	0.0002546	96	70	130	0.04788	0.6	20	
Copper	0.0636	0.0050	0.05	0.01109	105	70	130	0.06366	0.0	20	
Iron	0.284	0.020	0.15	0.1343	100	70	130	0.283	0.4	20	
Lead	0.0500	0.0010	0.05	0.0004822	99	70	130	0.05081	1.6	20	
Manganese	0.165	0.0010	0.05	0.1176	95	70	130	0.1635	1.0	20	
Molybdenum	0.0546	0.0010	0.05	0.004426	100	70	130	0.05476	0.3	20	
Nickel	0.0528	0.0050	0.05	0.0008607	104	70	130	0.0531	0.6	20	
Selenium	0.0537	0.0010	0.05	0.0001865	107	70	130	0.05374	0.0	20	
Silver	0.0174	0.0010	0.02		87	70	130	0.01749	0.3	20	
Uranium	0.0530	0.00030	0.05	0.003265	99	70	130	0.05287	0.2	20	
Vanadium	0.0534	0.010	0.05	0.002446	102	70	130	0.054	1.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 69** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-011BMSD** Method: **E200.8**

Analysis Date: **06/11/14 22:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0690	0.010	0.05	0.01687	104	70	130	0.07032	1.9	20	

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140611B: 99** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/12/14 01:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	40.2	0.10	40		100	70	130				
Antimony	8.20E-05	0.050									
Arsenic	0.000139	0.0050									
Barium	0.000149	0.10									
Beryllium	1.90E-05	0.0010									
Cadmium	0.000288	0.0010									
Chromium	0.00107	0.010									
Cobalt	0.000189	0.010									
Copper	0.000353	0.010									
Iron	98.0	0.020	100		98	70	130				
Lead	0.000235	0.010									
Manganese	9.90E-05	0.010									
Molybdenum	0.848	0.0050	0.8		106	70	130				
Nickel	0.000592	0.010									
Selenium	0.000531	0.0050									
Silver	0.000250	0.0050									
Uranium	5.00E-06	0.0010									
Vanadium	5.10E-05	0.10									
Zinc	0.00145	0.010									

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 100** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/12/14 01:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	40.3	0.10	40		101	70	130				
Antimony	0.000145	0.050				0	0				
Arsenic	0.0109	0.0050	0.01		109	70	130				
Barium	0.000197	0.10				0	0				
Beryllium	1.10E-05	0.0010				0	0				
Cadmium	0.00906	0.0010	0.01		91	70	130				
Chromium	0.0215	0.010	0.02		107	70	130				
Cobalt	0.0187	0.010	0.02		94	70	130				
Copper	0.0203	0.010	0.02		102	70	130				
Iron	98.7	0.020	100		99	70	130				
Lead	0.000329	0.010				0	0				
Manganese	0.0187	0.010	0.02		94	70	130				
Molybdenum	0.845	0.0050	0.8		106	70	130				
Nickel	0.0208	0.010	0.02		104	70	130				
Selenium	0.0104	0.0050	0.01		104	70	130				
Silver	0.0181	0.0050	0.02		91	70	130				
Uranium	5.80E-05	0.0010				0	0				
Vanadium	0.0204	0.10	0.02		102	70	130				
Zinc	0.0113	0.010	0.01		113	70	130				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 184** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **06/11/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.299	0.10	0.3		100	90	110				
Antimony	0.0585	0.050	0.06		98	90	110				
Arsenic	0.0606	0.0050	0.06		101	90	110				
Barium	0.0599	0.10	0.06		100	90	110				
Beryllium	0.0293	0.0010	0.03		98	90	110				
Cadmium	0.0320	0.0010	0.03		107	90	110				
Chromium	0.0605	0.010	0.06		101	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 184** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **06/11/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.0590	0.010	0.06		98	90	110				
Copper	0.0625	0.010	0.06		104	90	110				
Iron	0.306	0.020	0.3		102	90	110				
Lead	0.0595	0.010	0.06		99	90	110				
Manganese	0.296	0.010	0.3		99	90	110				
Molybdenum	0.0589	0.0050	0.06		98	90	110				
Nickel	0.0619	0.010	0.06		103	90	110				
Selenium	0.0609	0.0050	0.06		102	90	110				
Silver	0.0301	0.0050	0.03		100	90	110				
Uranium	0.0592	0.0010	0.06		99	90	110				
Vanadium	0.0590	0.10	0.06		98	90	110				
Zinc	0.0630	0.010	0.06		105	90	110				

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 185** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/11/14 11:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.5	0.10	40		94	70	130				
Antimony	0.000118	0.050									
Arsenic	0.000225	0.0050									
Barium	0.000138	0.10									
Beryllium	-2.00E-05	0.0010									
Cadmium	0.000248	0.0010									
Chromium	0.00106	0.010									
Cobalt	0.000158	0.010									
Copper	0.000347	0.010									
Iron	95.3	0.020	100		95	70	130				
Lead	0.000222	0.010									
Manganese	5.70E-05	0.010									
Molybdenum	0.808	0.0050	0.8		101	70	130				
Nickel	0.000508	0.010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 185** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **06/11/14 11:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.000693	0.0050									
Silver	0.000356	0.0050									
Uranium	3.60E-05	0.0010									
Vanadium	6.40E-05	0.10									
Zinc	0.00158	0.010									

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 186** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/11/14 12:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.6	0.10	40		94	70	130				
Antimony	0.000148	0.050				0	0				
Arsenic	0.0106	0.0050	0.01		106	70	130				
Barium	0.000199	0.10				0	0				
Beryllium	-1.90E-05	0.0010				0	0				
Cadmium	0.00944	0.0010	0.01		94	70	130				
Chromium	0.0215	0.010	0.02		107	70	130				
Cobalt	0.0190	0.010	0.02		95	70	130				
Copper	0.0209	0.010	0.02		104	70	130				
Iron	95.2	0.020	100		95	70	130				
Lead	0.000323	0.010				0	0				
Manganese	0.0189	0.010	0.02		95	70	130				
Molybdenum	0.804	0.0050	0.8		101	70	130				
Nickel	0.0209	0.010	0.02		104	70	130				
Selenium	0.0103	0.0050	0.01		103	70	130				
Silver	0.0181	0.0050	0.02		91	70	130				
Uranium	5.80E-05	0.0010				0	0				
Vanadium	0.0202	0.10	0.02		101	70	130				
Zinc	0.0116	0.010	0.01		116	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 186** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **06/11/14 12:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-001B, H14060106-001C, H14060106-002B, H14060106-002C, H14060106-003B, H14060106-003C, H14060106-004B, H14060106-004C, H14060106-005B, H14060106-005C, H14060106-006B, H14060106-006C, H14060106-007B, H14060106-007C, H14060106-008B, H14060106-008C, H14060106-009B, H14060106-009C, H14060106-010B, H14060106-010C, H14060106-011B, H14060106-011C, H14060106-012B, H14060106-012C, H14060106-013B, H14060106-013C, H14060106-014B, H14060106-014C, H14060106-015B, H14060106-015C, H14060106-016B, H14060106-016C**

Run ID :Run Order: **ICPMS204-B_140611B: 193** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **06/11/14 12:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	ND	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	ND	3E-05									
Iron	0.001	0.0002									
Lead	ND	8E-06									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	ND	0.0003									

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140611B: 194** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **06/11/14 12:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0461	0.10	0.05		92	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98002

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140611B: 194** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **06/11/14 12:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0493	0.050	0.05		99	85	115				
Arsenic	0.0516	0.0050	0.05		103	85	115				
Barium	0.0503	0.10	0.05		101	85	115				
Beryllium	0.0474	0.0010	0.05		95	85	115				
Cadmium	0.0528	0.0010	0.05		106	85	115				
Chromium	0.0506	0.010	0.05		101	85	115				
Cobalt	0.0484	0.010	0.05		97	85	115				
Copper	0.0538	0.010	0.05		108	85	115				
Iron	0.148	0.020	0.15	0.001206	98	85	115				
Lead	0.0505	0.010	0.05		101	85	115				
Manganese	0.0476	0.010	0.05		95	85	115				
Molybdenum	0.0480	0.0050	0.05		96	85	115				
Nickel	0.0531	0.010	0.05		106	85	115				
Selenium	0.0531	0.0050	0.05		106	85	115				
Silver	0.0187	0.0050	0.02		93	85	115				
Uranium	0.0486	0.0010	0.05		97	85	115				
Vanadium	0.0493	0.10	0.05		99	85	115				
Zinc	0.0549	0.010	0.05		110	85	115				

Associated samples: **H14060106-001B, H14060106-002B, H14060106-003B, H14060106-004B, H14060106-005B, H14060106-006B, H14060106-007B, H14060106-008B, H14060106-009B, H14060106-010B, H14060106-011B, H14060106-012B, H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98050

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140616B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **06/16/14 18:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.302	0.10	0.3		101	90	110				
Cadmium	0.0316	0.0010	0.03		105	90	110				

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140616B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **06/16/14 19:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	39.7	0.10	40		99	70	130				
Cadmium	0.000369	0.0010									

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140616B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **06/16/14 19:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	40.4	0.10	40		101	70	130				
Cadmium	0.00987	0.0010	0.01		99	70	130				

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140616B: 16** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**
Analysis Date: **06/16/14 19:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0004	0.0002									
Cadmium	ND	6E-06									

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140616B: 17** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**
Analysis Date: **06/16/14 19:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0498	0.10	0.05	0.0003547	99	85	115				
Cadmium	0.0520	0.0010	0.05		104	85	115				

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98050

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140616B: 20** SampType: **Sample Matrix Spike** Lab ID: **H14060106-013BMS** Method: **E200.8**

Analysis Date: **06/16/14 19:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0586	0.030	0.05	0.009794	98	70	130				
Cadmium	0.0522	0.0010	0.05	0.0000574	104	70	130				

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Run ID :Run Order: **ICPMS204-B_140616B: 21** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14060106-013BMSD** Method: **E200.8**

Analysis Date: **06/16/14 19:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0592	0.030	0.05	0.009794	99	70	130	0.05859	1.1	20	
Cadmium	0.0514	0.0010	0.05	0.0000574	103	70	130	0.05225	1.6	20	

Associated samples: **H14060106-013B, H14060106-014B, H14060106-015B, H14060106-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98286

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/24/14 13:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.13	0.10	4		103	90	110				
Barium	0.820	0.10	0.8		102	90	110				
Beryllium	0.406	0.0010	0.4		101	90	110				
Boron	0.846	0.10	0.8		106	90	110				
Copper	0.815	0.010	0.8		102	90	110				
Iron	4.10	0.020	4		103	90	110				
Manganese	4.10	0.010	4		102	90	110				
Vanadium	0.826	0.10	0.8		103	90	110				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140624B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/24/14 13:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	538	0.10	500		108	80	120				
Barium	0.000380	0.10				0	0				
Beryllium	-3.00E-05	0.0010				0	0				
Boron	0.00574	0.10				0	0				
Copper	0.00220	0.010				0	0				
Iron	192	0.020	200		96	80	120				
Manganese	-0.00642	0.010				0	0				
Vanadium	0.00302	0.10				0	0				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICP2-HE_140624B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/24/14 13:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	527	0.10	500		105	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98286

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140624B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/24/14 13:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.507	0.10	0.5		101	80	120				
Beryllium	0.489	0.0010	0.5		98	80	120				
Boron	1.03	0.10	1		103	80	120				
Copper	0.512	0.010	0.5		102	80	120				
Iron	187	0.020	200		94	80	120				
Manganese	0.482	0.010	0.5		96	80	120				
Vanadium	0.488	0.10	0.5		98	80	120				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98308

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/24/14 13:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0606	0.0010	0.06		101	90	110				
Arsenic	0.0586	0.0010	0.06		98	90	110				
Boron	0.0602	0.0010	0.06		100	90	110				
Cadmium	0.0314	0.0010	0.03		105	90	110				
Chromium	0.0593	0.0010	0.06		99	90	110				
Cobalt	0.0596	0.0010	0.06		99	90	110				
Lead	0.0584	0.0010	0.06		97	90	110				
Molybdenum	0.0594	0.0010	0.06		99	90	110				
Selenium	0.0584	0.0010	0.06		97	90	110				
Silver	0.0300	0.0010	0.03		100	90	110				
Uranium	0.0581	0.00030	0.06		97	90	110				
Vanadium	0.0582	0.0010	0.06		97	90	110				
Zinc	0.0605	0.0010	0.06		101	90	110				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Run ID :Run Order: **ICPMS204-B_140624B: 33** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/24/14 18:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0596	0.0010	0.06		99	90	110				
Arsenic	0.0605	0.0010	0.06		101	90	110				
Boron	0.0616	0.0010	0.06		103	90	110				
Cadmium	0.0320	0.0010	0.03		106	90	110				
Chromium	0.0607	0.0010	0.06		101	90	110				
Cobalt	0.0610	0.0010	0.06		102	90	110				
Lead	0.0593	0.0010	0.06		99	90	110				
Molybdenum	0.0599	0.0010	0.06		100	90	110				
Selenium	0.0606	0.0010	0.06		101	90	110				
Silver	0.0300	0.0010	0.03		100	90	110				
Uranium	0.0592	0.00030	0.06		99	90	110				
Vanadium	0.0596	0.0010	0.06		99	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98308

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140624B: 33** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/24/14 18:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 13	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0634	0.0010	0.06		106	90	110				

Associated samples: **H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98318

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **06/25/14 12:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.00	0.10	4		100	90	110				
Arsenic	0.828	0.0085	0.8		103	90	110				
Barium	0.791	0.10	0.8		99	90	110				
Beryllium	0.412	0.0010	0.4		103	90	110				
Boron	0.829	0.10	0.8		104	90	110				
Cadmium	0.413	0.0010	0.4		103	90	110				
Chromium	0.781	0.010	0.8		98	90	110				
Copper	0.798	0.010	0.8		100	90	110				
Iron	3.89	0.020	4		97	90	110				
Lead	0.821	0.010	0.8		103	90	110				
Manganese	4.10	0.010	4		103	90	110				
Nickel	0.774	0.010	0.8		97	90	110				
Vanadium	0.835	0.10	0.8		104	90	110				
Zinc	0.841	0.010	0.8		105	90	110				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B, H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-054A, H14060106-054B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/25/14 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	536	0.10	500		107	80	120				
Arsenic	0.00236	0.0085				0	0				
Barium	0.000790	0.10				0	0				
Beryllium	6.00E-05	0.0010				0	0				
Boron	0.00377	0.10				0	0				
Cadmium	0.00357	0.0010				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98318

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **06/25/14 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	-0.0128	0.010				0	0				
Copper	-0.000630	0.010				0	0				
Iron	188	0.020	200		94	80	120				
Lead	-0.0374	0.010				0	0				
Manganese	-0.00877	0.010				0	0				
Nickel	0.00737	0.010				0	0				
Vanadium	0.00161	0.10				0	0				
Zinc	0.00306	0.010				0	0				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B, H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-054A, H14060106-054B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140625A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/25/14 12:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	512	0.10	500		102	80	120				
Arsenic	0.989	0.0085	1		99	80	120				
Barium	0.492	0.10	0.5		98	80	120				
Beryllium	0.499	0.0010	0.5		100	80	120				
Boron	0.980	0.10	1		98	80	120				
Cadmium	0.934	0.0010	1		93	80	120				
Chromium	0.461	0.010	0.5		92	80	120				
Copper	0.498	0.010	0.5		100	80	120				
Iron	178	0.020	200		89	80	120				
Lead	0.930	0.010	1		93	80	120				
Manganese	0.482	0.010	0.5		96	80	120				
Nickel	0.873	0.010	1		87	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98318

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140625A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **06/25/14 12:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 14	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vanadium	0.494	0.10	0.5		99	80	120				
Zinc	1.00	0.010	1		100	80	120				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B, H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-029A, H14060106-029B, H14060106-030A, H14060106-030B, H14060106-031A, H14060106-031B, H14060106-032A, H14060106-032B, H14060106-033A, H14060106-033B, H14060106-034A, H14060106-034B, H14060106-035A, H14060106-035B, H14060106-036A, H14060106-036B, H14060106-037A, H14060106-037B, H14060106-038A, H14060106-038B, H14060106-039A, H14060106-039B, H14060106-040A, H14060106-040B, H14060106-041A, H14060106-041B, H14060106-042A, H14060106-042B, H14060106-043A, H14060106-043B, H14060106-044A, H14060106-044B, H14060106-045A, H14060106-045B, H14060106-046A, H14060106-046B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-054A, H14060106-054B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98360

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/25/14 10:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0614	0.0010	0.06		102	90	110				
Arsenic	0.0604	0.0010	0.06		101	90	110				
Boron	0.0610	0.0010	0.06		102	90	110				
Cadmium	0.0315	0.0010	0.03		105	90	110				
Chromium	0.0610	0.0010	0.06		102	90	110				
Cobalt	0.0610	0.0010	0.06		102	90	110				
Lead	0.0598	0.0010	0.06		100	90	110				
Molybdenum	0.0596	0.0010	0.06		99	90	110				
Selenium	0.0634	0.0010	0.06		106	90	110				
Silver	0.0302	0.0010	0.03		101	90	110				
Uranium	0.0594	0.00030	0.06		99	90	110				

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B, H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-054A, H14060106-054B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICPMS204-B_140625A: 53** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/25/14 14:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0605	0.0010	0.06		101	90	110				
Arsenic	0.0605	0.0010	0.06		101	90	110				
Boron	0.0610	0.0010	0.06		102	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Chromium	0.0603	0.0010	0.06		101	90	110				
Cobalt	0.0608	0.0010	0.06		101	90	110				
Lead	0.0595	0.0010	0.06		99	90	110				
Molybdenum	0.0601	0.0010	0.06		100	90	110				
Selenium	0.0585	0.0010	0.06		98	90	110				
Silver	0.0301	0.0010	0.03		100	90	110				
Uranium	0.0593	0.00030	0.06		99	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98360

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140625A: 53** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/25/14 14:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017A, H14060106-017B, H14060106-018A, H14060106-018B, H14060106-019A, H14060106-019B, H14060106-020A, H14060106-020B, H14060106-021A, H14060106-021B, H14060106-022A, H14060106-022B, H14060106-023A, H14060106-023B, H14060106-024A, H14060106-024B, H14060106-025A, H14060106-025B, H14060106-026A, H14060106-026B, H14060106-027A, H14060106-027B, H14060106-028A, H14060106-028B, H14060106-047A, H14060106-047B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-050A, H14060106-050B, H14060106-051A, H14060106-051B, H14060106-052A, H14060106-052B, H14060106-053A, H14060106-053B, H14060106-054A, H14060106-054B, H14060106-055A, H14060106-055B, H14060106-056A, H14060106-056B, H14060106-057A, H14060106-057B, H14060106-058A, H14060106-058B, H14060106-059A, H14060106-059B, H14060106-060A, H14060106-060B, H14060106-061A, H14060106-061B, H14060106-062A, H14060106-062B, H14060106-063A, H14060106-063B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98406

Date: *14-Jul-14*

Run ID :Run Order: **ICPMS204-B_140626B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **06/26/14 13:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.0317	0.0010	0.03		106	90	110				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-029A, H14060106-029B, H14060106-031A, H14060106-031B, H14060106-048A, H14060106-048B, H14060106-049A, H14060106-049B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98453

Date: *14-Jul-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 1** SampType: **Sample Duplicate** Lab ID: **H14060106-018BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	24.9	0.20						25.32			

Associated samples: **H14060106-017B, H14060106-018B, H14060106-019B, H14060106-020B, H14060106-021B, H14060106-022B, H14060106-023B, H14060106-024B, H14060106-025B, H14060106-026B, H14060106-027B, H14060106-028B, H14060106-029B, H14060106-030B, H14060106-031B, H14060106-032B, H14060106-033B, H14060106-034B, H14060106-035B, H14060106-036B, H14060106-037B, H14060106-038B, H14060106-039B, H14060106-040B, H14060106-041B, H14060106-042B, H14060106-043B, H14060106-044B, H14060106-045B, H14060106-046B, H14060106-047B, H14060106-048B, H14060106-049B, H14060106-050B, H14060106-051B, H14060106-052B, H14060106-053B, H14060106-054B, H14060106-055B, H14060106-056B, H14060106-057B, H14060106-058B, H14060106-059B, H14060106-060B, H14060106-061B, H14060106-062B, H14060106-063B, H14060106-064B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 2** SampType: **Sample Duplicate** Lab ID: **H14060106-028BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	42.8	0.20						43.35			

Associated samples: **H14060106-017B, H14060106-018B, H14060106-019B, H14060106-020B, H14060106-021B, H14060106-022B, H14060106-023B, H14060106-024B, H14060106-025B, H14060106-026B, H14060106-027B, H14060106-028B, H14060106-029B, H14060106-030B, H14060106-031B, H14060106-032B, H14060106-033B, H14060106-034B, H14060106-035B, H14060106-036B, H14060106-037B, H14060106-038B, H14060106-039B, H14060106-040B, H14060106-041B, H14060106-042B, H14060106-043B, H14060106-044B, H14060106-045B, H14060106-046B, H14060106-047B, H14060106-048B, H14060106-049B, H14060106-050B, H14060106-051B, H14060106-052B, H14060106-053B, H14060106-054B, H14060106-055B, H14060106-056B, H14060106-057B, H14060106-058B, H14060106-059B, H14060106-060B, H14060106-061B, H14060106-062B, H14060106-063B, H14060106-064B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 3** SampType: **Sample Duplicate** Lab ID: **H14060106-038BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	64.1	0.20						73.59			

Associated samples: **H14060106-017B, H14060106-018B, H14060106-019B, H14060106-020B, H14060106-021B, H14060106-022B, H14060106-023B, H14060106-024B, H14060106-025B, H14060106-026B, H14060106-027B, H14060106-028B, H14060106-029B, H14060106-030B, H14060106-031B, H14060106-032B, H14060106-033B, H14060106-034B, H14060106-035B, H14060106-036B, H14060106-037B, H14060106-038B, H14060106-039B, H14060106-040B, H14060106-041B, H14060106-042B, H14060106-043B, H14060106-044B, H14060106-045B, H14060106-046B, H14060106-047B, H14060106-048B, H14060106-049B, H14060106-050B, H14060106-051B, H14060106-052B, H14060106-053B, H14060106-054B, H14060106-055B, H14060106-056B, H14060106-057B, H14060106-058B, H14060106-059B, H14060106-060B, H14060106-061B, H14060106-062B, H14060106-063B, H14060106-064B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 4** SampType: **Sample Duplicate** Lab ID: **H14060106-048BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	29.0	0.20						28.71			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98453

Date: *14-Jul-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 4** SampType: **Sample Duplicate** Lab ID: **H14060106-048BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-017B, H14060106-018B, H14060106-019B, H14060106-020B, H14060106-021B, H14060106-022B, H14060106-023B, H14060106-024B, H14060106-025B, H14060106-026B, H14060106-027B, H14060106-028B, H14060106-029B, H14060106-030B, H14060106-031B, H14060106-032B, H14060106-033B, H14060106-034B, H14060106-035B, H14060106-036B, H14060106-037B, H14060106-038B, H14060106-039B, H14060106-040B, H14060106-041B, H14060106-042B, H14060106-043B, H14060106-044B, H14060106-045B, H14060106-046B, H14060106-047B, H14060106-048B, H14060106-049B, H14060106-050B, H14060106-051B, H14060106-052B, H14060106-053B, H14060106-054B, H14060106-055B, H14060106-056B, H14060106-057B, H14060106-058B, H14060106-059B, H14060106-060B, H14060106-061B, H14060106-062B, H14060106-063B, H14060106-064B**

Run ID :Run Order: **SOIL DRYING OVEN 2_140627A: 5** SampType: **Sample Duplicate** Lab ID: **H14060106-058BDUP** Method: **D2974**

Analysis Date: **06/30/14 17:46** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	14.0	0.20						13.85			

Associated samples: **H14060106-017B, H14060106-018B, H14060106-019B, H14060106-020B, H14060106-021B, H14060106-022B, H14060106-023B, H14060106-024B, H14060106-025B, H14060106-026B, H14060106-027B, H14060106-028B, H14060106-029B, H14060106-030B, H14060106-031B, H14060106-032B, H14060106-033B, H14060106-034B, H14060106-035B, H14060106-036B, H14060106-037B, H14060106-038B, H14060106-039B, H14060106-040B, H14060106-041B, H14060106-042B, H14060106-043B, H14060106-044B, H14060106-045B, H14060106-046B, H14060106-047B, H14060106-048B, H14060106-049B, H14060106-050B, H14060106-051B, H14060106-052B, H14060106-053B, H14060106-054B, H14060106-055B, H14060106-056B, H14060106-057B, H14060106-058B, H14060106-059B, H14060106-060B, H14060106-061B, H14060106-062B, H14060106-063B, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98483

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140701B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **07/01/14 12:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.807	0.010	0.8		101	90	110				
Manganese	3.92	0.010	4		98	90	110				
Vanadium	0.798	0.10	0.8		100	90	110				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140701B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **07/01/14 12:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	-5.00E-05	0.010				0	0				
Manganese	-0.00282	0.010				0	0				
Vanadium	0.000310	0.10				0	0				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140701B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **07/01/14 12:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 3	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.520	0.010	0.5		104	80	120				
Manganese	0.466	0.010	0.5		93	80	120				
Vanadium	0.479	0.10	0.5		96	80	120				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98518

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **07/02/14 09:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.775	0.0085	0.8		97	90	110				
Barium	0.804	0.10	0.8		101	90	110				
Chromium	0.785	0.010	0.8		98	90	110				
Copper	0.806	0.010	0.8		101	90	110				
Lead	0.751	0.010	0.8		94	90	110				
Nickel	0.762	0.010	0.8		95	90	110				
Zinc	0.783	0.010	0.8		98	90	110				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140702A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **07/02/14 09:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	-0.00624	0.0085				0	0				
Barium	0.000500	0.10				0	0				
Chromium	0.000890	0.013				0	0				
Copper	0.00196	0.010				0	0				
Lead	-0.00853	0.010				0	0				
Nickel	0.00868	0.010				0	0				
Zinc	0.00491	0.010				0	0				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Run ID :Run Order: **ICP2-HE_140702A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **07/02/14 10:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.961	0.0085	1		96	80	120				
Barium	0.521	0.10	0.5		104	80	120				
Chromium	0.479	0.013	0.5		96	80	120				
Copper	0.534	0.010	0.5		107	80	120				
Lead	0.877	0.010	1		88	80	120				
Nickel	0.903	0.010	1		90	80	120				
Zinc	0.984	0.010	1		98	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98518

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140702A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **07/02/14 10:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 7	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B, H14060106-064A, H14060106-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98669

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140708B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **07/08/14 10:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.816	0.0085	0.8		102	90	110				
Barium	0.794	0.10	0.8		99	90	110				
Copper	0.804	0.010	0.8		101	90	110				
Iron	3.99	0.020	4		100	90	110				
Lead	0.821	0.010	0.8		103	90	110				
Zinc	0.817	0.010	0.8		102	90	110				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **07/08/14 10:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.00353	0.0085				0	0				
Barium	0.000170	0.10				0	0				
Copper	0.00153	0.010				0	0				
Iron	185	0.020	200		92	80	120				
Lead	-0.00734	0.010				0	0				
Zinc	0.00263	0.010				0	0				

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Run ID :Run Order: **ICP2-HE_140708B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **07/08/14 10:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.967	0.0085	1		97	80	120				
Barium	0.504	0.10	0.5		101	80	120				
Copper	0.514	0.010	0.5		103	80	120				
Iron	184	0.020	200		92	80	120				
Lead	0.899	0.010	1		90	80	120				
Zinc	0.975	0.010	1		97	80	120				

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R98669

Date: *14-Jul-14*

Run ID :Run Order: **ICP2-HE_140708B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **07/08/14 10:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 6	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14060106-019A, H14060106-019B, H14060106-022A, H14060106-022B, H14060106-025A, H14060106-025B, H14060106-028A, H14060106-028B, H14060106-049A, H14060106-049B, H14060106-052A, H14060106-052B, H14060106-055A, H14060106-055B, H14060106-058A, H14060106-058B, H14060106-061A, H14060106-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14060106
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140605A

Date: *14-Jul-14*

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 1** SampType: **Method Blank** Lab ID: **MB-1_140605A** Method: **A2540 D**

Analysis Date: **06/05/14 08:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_140605A** Method: **A2540 D**

Analysis Date: **06/05/14 08:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	92.0	10	100		92	80	120				

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 4** SampType: **Sample Duplicate** Lab ID: **H14060093-002B DUP** Method: **A2540 D**

Analysis Date: **06/05/14 08:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	86.0	10						74	15	5	R

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Run ID :Run Order: **ACCU-124 (14410200)_140605A: 1** SampType: **Sample Duplicate** Lab ID: **H14060094-001B DUP** Method: **A2540 D**

Analysis Date: **06/05/14 09:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	90.0	10						90	0.0	5	

Associated samples: **H14060106-001A, H14060106-002A, H14060106-003A, H14060106-004A, H14060106-005A, H14060106-006A, H14060106-007A, H14060106-008A, H14060106-009A, H14060106-010A, H14060106-011A, H14060106-012A, H14060106-013A, H14060106-014A, H14060106-015A, H14060106-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

MT DEQ-Federal Superfund H14060106

Login completed by: Tracy L. Lorash
Date Received: 6/4/2014
Reviewed by: BL2000\sdull
Received by: TLL
Reviewed Date: 6/16/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☑	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample ID on COC is Field Duplicate #1 -ID on bottles is Field Duplicate #1 (SS-08). Logged in with ID from COC. SS-19, SS-11D, SS-11C and SS-10B nutrient samples were preserved to pH <2 with 2 mL of sulfuric acid per 250 mL in the laboratory upon receipt.
Cooler 1 was received at 0.7°C, Cooler 2 at 15.8°C, Cooler 3 at 0.6°C and Box at 15.8°C. Samples in Coolers 1 and 3 were received on wet ice and temperature was taken from a temperature blank. Samples in Cooler 2 and Box were not received on ice and temperature was taken from a client sample. TI 6/4/14

ANALYTICAL SUMMARY REPORT

July 09, 2014

MT DEQ-Federal Superfund
PO Box 200901
Helena, MT 59620-0901

Work Order: H14060159 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 16 samples for MT DEQ-Federal Superfund on 6/5/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14060159-001	LYS-08	06/04/14 15:00	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-002	LYS-03	06/04/14 15:20	06/05/14	Aqueous	Same As Above
H14060159-003	MW-2B	06/04/14 15:30	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-004	LYS-06	06/04/14 15:45	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-005	LYS-01	06/04/14 16:10	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-006	LYS-07	06/04/14 16:20	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-007	LYS-02	06/04/14 16:40	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA

ANALYTICAL SUMMARY REPORT

H14060159-008	LYP-07	06/04/14 16:45	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-009	LYS-05	06/04/14 16:35	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-010	LYS-04	06/04/14 17:00	06/05/14	Aqueous	Same As Above
H14060159-011	MW-2D	06/04/14 17:30	06/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14060159-012	MW-2C	06/04/14 19:00	06/05/14	Aqueous	Same As Above
H14060159-013	1GW-1056	06/04/14 19:15	06/05/14	Aqueous	Same As Above
H14060159-014	MW-2A	06/04/14 20:45	06/05/14	Aqueous	Same As Above
H14060159-015	1GW-1056 DUP	06/04/14 19:15	06/05/14	Aqueous	Same As Above
H14060159-016	Field Blank	06/04/14 19:20	06/05/14	Aqueous	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-001
Client Sample ID: LYS-08

Report Date: 07/09/14
Collection Date: 06/04/14 15:00
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Hardness as CaCO3	799	mg/L		1		A2340 B	06/27/14 12:46 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 15:52 / sld
Antimony	ND	mg/L	D	0.0009		E200.8	06/16/14 22:36 / dck
Arsenic	0.005	mg/L		0.001		E200.8	06/16/14 22:36 / dck
Barium	0.030	mg/L		0.003		E200.8	06/16/14 22:36 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 22:36 / dck
Boron	0.1	mg/L		0.1		E200.7	06/06/14 15:52 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 22:36 / dck
Calcium	171	mg/L		1		E200.7	06/06/14 15:52 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 22:36 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 22:36 / dck
Copper	0.001	mg/L		0.001		E200.8	06/18/14 22:21 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 22:36 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 22:36 / dck
Magnesium	90	mg/L		1		E200.7	06/06/14 15:52 / sld
Manganese	0.005	mg/L		0.001		E200.8	06/16/14 22:36 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/11/14 12:09 / sbk
Molybdenum	0.008	mg/L		0.005		E200.8	06/16/14 22:36 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 22:36 / dck
Potassium	6	mg/L		1		E200.7	06/06/14 15:52 / sld
Selenium	0.012	mg/L		0.001		E200.8	06/16/14 22:36 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 22:36 / dck
Sodium	116	mg/L		1		E200.7	06/06/14 15:52 / sld
Uranium	0.123	mg/L		0.0002		E200.8	06/16/14 22:36 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 22:36 / dck
Zinc	ND	mg/L		0.008		E200.8	06/16/14 22:36 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-002
Client Sample ID: LYS-03

Report Date: 07/09/14
Collection Date: 06/04/14 15:20
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Hardness as CaCO3	145	mg/L		1		A2340 B	06/27/14 12:46 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 15:56 / sld
Antimony	0.0010	mg/L	D	0.0009		E200.8	06/16/14 22:41 / dck
Arsenic	0.071	mg/L		0.001		E200.8	06/16/14 22:41 / dck
Barium	0.039	mg/L		0.003		E200.8	06/16/14 22:41 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 22:41 / dck
Boron	0.1	mg/L		0.1		E200.7	06/06/14 15:56 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 22:41 / dck
Calcium	43	mg/L		1		E200.7	06/06/14 15:56 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 22:41 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 22:41 / dck
Copper	0.002	mg/L		0.001		E200.8	06/18/14 22:25 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 22:41 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 22:41 / dck
Magnesium	9	mg/L		1		E200.7	06/06/14 15:56 / sld
Manganese	0.001	mg/L		0.001		E200.8	06/16/14 22:41 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/11/14 12:13 / sbk
Molybdenum	0.022	mg/L		0.005		E200.8	06/16/14 22:41 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 22:41 / dck
Potassium	4	mg/L		1		E200.7	06/06/14 15:56 / sld
Selenium	ND	mg/L		0.001		E200.8	06/16/14 22:41 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 22:41 / dck
Sodium	49	mg/L		1		E200.7	06/06/14 15:56 / sld
Uranium	0.0018	mg/L		0.0002		E200.8	06/16/14 22:41 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 22:41 / dck
Zinc	0.033	mg/L		0.008		E200.8	06/16/14 22:41 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-003
Client Sample ID: MW-2B

Report Date: 07/09/14
Collection Date: 06/04/14 15:30
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	88	mg/L		4		A2320 B	06/06/14 13:04 / SRW
Bicarbonate as HCO3	110	mg/L		4		A2320 B	06/06/14 13:04 / SRW
Chloride	17	mg/L		1		E300.0	06/09/14 13:50 / SRW
Sulfate	120	mg/L		1		E300.0	06/09/14 13:50 / SRW
Hardness as CaCO3	187	mg/L		1		A2340 B	06/06/14 15:59 / abb
METALS, DISSOLVED							
Aluminum	0.101	mg/L		0.009		E200.7	06/06/14 15:59 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/26/14 03:12 / dck
Arsenic	0.010	mg/L		0.001		E200.8	06/16/14 22:45 / dck
Barium	0.028	mg/L		0.003		E200.8	06/16/14 22:45 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 22:45 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 15:59 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 22:45 / dck
Calcium	52	mg/L		1		E200.7	06/06/14 15:59 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 22:45 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 22:45 / dck
Copper	0.002	mg/L		0.001		E200.8	06/18/14 22:30 / dck
Iron	0.06	mg/L		0.02		E200.8	06/16/14 22:45 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 22:45 / dck
Magnesium	14	mg/L		1		E200.7	06/06/14 15:59 / sld
Manganese	0.018	mg/L		0.001		E200.8	06/16/14 22:45 / dck
Mercury	5.0E-06	mg/L		5E-06		E245.1	06/11/14 12:17 / sbk
Molybdenum	ND	mg/L		0.005		E200.8	06/16/14 22:45 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 22:45 / dck
Potassium	3	mg/L		1		E200.7	06/06/14 15:59 / sld
Selenium	0.002	mg/L		0.001		E200.8	06/16/14 22:45 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 22:45 / dck
Sodium	22	mg/L		1		E200.7	06/06/14 15:59 / sld
Uranium	0.0059	mg/L		0.0002		E200.8	06/16/14 22:45 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 22:45 / dck
Zinc	ND	mg/L		0.008		E200.8	06/16/14 22:45 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-004
Client Sample ID: LYS-06

Report Date: 07/09/14
Collection Date: 06/04/14 15:45
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	45	mg/L		4		A2320 B	06/06/14 13:11 / SRW
Bicarbonate as HCO3	54	mg/L		4		A2320 B	06/06/14 13:11 / SRW
Chloride	28	mg/L		1		E300.0	06/09/14 14:02 / SRW
Sulfate	1600	mg/L		1		E300.0	06/11/14 12:22 / SRW
Hardness as CaCO3	1090	mg/L		1		A2340 B	06/16/14 23:03 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	06/18/14 22:34 / dck
Antimony	ND	mg/L		0.0005		E200.8	07/03/14 18:23 / dck
Arsenic	0.002	mg/L		0.001		E200.8	06/16/14 23:03 / dck
Barium	0.009	mg/L		0.003		E200.8	06/16/14 23:03 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:03 / dck
Boron	0.2	mg/L		0.1		E200.8	06/19/14 19:48 / dck
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 23:03 / dck
Calcium	344	mg/L		1		E200.8	06/16/14 23:03 / dck
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:03 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:03 / dck
Copper	0.006	mg/L		0.001		E200.8	06/18/14 22:34 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 23:03 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:03 / dck
Magnesium	57	mg/L		1		E200.8	06/16/14 23:03 / dck
Manganese	0.004	mg/L		0.001		E200.8	06/16/14 23:03 / dck
Mercury	5.8E-06	mg/L		5E-06		E245.1	06/11/14 12:21 / sbk
Molybdenum	0.007	mg/L		0.005		E200.8	06/16/14 23:03 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 23:03 / dck
Potassium	ND	mg/L		1		E200.8	06/16/14 23:03 / dck
Selenium	0.005	mg/L		0.001		E200.8	06/16/14 23:03 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:03 / dck
Sodium	241	mg/L		1		E200.8	06/16/14 23:03 / dck
Uranium	0.0005	mg/L		0.0002		E200.8	06/16/14 23:03 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:03 / dck
Zinc	0.014	mg/L		0.008		E200.8	06/16/14 23:03 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-005
Client Sample ID: LYS-01

Report Date: 07/09/14
Collection Date: 06/04/14 16:10
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	140	mg/L		4		A2320 B	06/06/14 13:16 / SRW
Bicarbonate as HCO3	170	mg/L		4		A2320 B	06/06/14 13:16 / SRW
Chloride	24	mg/L		1		E300.0	06/09/14 14:13 / SRW
Sulfate	220	mg/L		1		E300.0	06/09/14 14:13 / SRW
Hardness as CaCO3	294	mg/L		1		A2340 B	06/06/14 16:03 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:03 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/16/14 23:07 / dck
Arsenic	0.003	mg/L		0.001		E200.8	06/16/14 23:07 / dck
Barium	0.034	mg/L		0.003		E200.8	06/16/14 23:07 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:07 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:03 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 23:07 / dck
Calcium	87	mg/L		1		E200.7	06/06/14 16:03 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:07 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:07 / dck
Copper	ND	mg/L		0.001		E200.8	06/16/14 23:07 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 23:07 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:07 / dck
Magnesium	19	mg/L		1		E200.7	06/06/14 16:03 / sld
Manganese	ND	mg/L		0.001		E200.8	06/16/14 23:07 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/11/14 12:26 / sbk
Molybdenum	ND	mg/L		0.005		E200.8	06/16/14 23:07 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 23:07 / dck
Potassium	3	mg/L		1		E200.7	06/06/14 16:03 / sld
Selenium	0.005	mg/L		0.001		E200.8	06/16/14 23:07 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:07 / dck
Sodium	32	mg/L		1		E200.7	06/06/14 16:03 / sld
Uranium	0.0706	mg/L		0.0002		E200.8	06/16/14 23:07 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:07 / dck
Zinc	ND	mg/L		0.008		E200.8	06/16/14 23:07 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-006
Client Sample ID: LYS-07

Report Date: 07/09/14
Collection Date: 06/04/14 16:20
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Hardness as CaCO3	939	mg/L		1		A2340 B	06/27/14 12:46 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	06/18/14 22:38 / dck
Antimony	0.0014	mg/L	D	0.0009		E200.8	06/16/14 23:12 / dck
Arsenic	0.006	mg/L		0.001		E200.8	06/16/14 23:12 / dck
Barium	0.007	mg/L		0.003		E200.8	06/16/14 23:12 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:12 / dck
Boron	0.2	mg/L		0.1		E200.8	06/19/14 20:06 / dck
Cadmium	0.00008	mg/L		0.00003		E200.8	06/18/14 22:38 / dck
Calcium	265	mg/L		1		E200.8	06/16/14 23:12 / dck
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:12 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:12 / dck
Copper	0.006	mg/L		0.001		E200.8	06/18/14 22:38 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 23:12 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:12 / dck
Magnesium	67	mg/L		1		E200.8	06/16/14 23:12 / dck
Manganese	0.003	mg/L		0.001		E200.8	06/16/14 23:12 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/11/14 12:30 / sbk
Molybdenum	0.123	mg/L		0.005		E200.8	06/16/14 23:12 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 23:12 / dck
Potassium	10	mg/L		1		E200.8	06/16/14 23:12 / dck
Selenium	0.003	mg/L		0.001		E200.8	06/16/14 23:12 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:12 / dck
Sodium	745	mg/L		1		E200.8	06/16/14 23:12 / dck
Uranium	0.154	mg/L		0.0002		E200.8	06/16/14 23:12 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:12 / dck
Zinc	0.045	mg/L		0.008		E200.8	06/16/14 23:12 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-007
Client Sample ID: LYS-02

Report Date: 07/09/14
Collection Date: 06/04/14 16:40
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	560	mg/L		4		A2320 B	06/06/14 13:23 / SRW
Bicarbonate as HCO3	680	mg/L		4		A2320 B	06/06/14 13:23 / SRW
Chloride	36	mg/L		1		E300.0	06/09/14 14:24 / SRW
Sulfate	8300	mg/L	D	2		E300.0	06/12/14 20:13 / SRW
Hardness as CaCO3	1720	mg/L		1		A2340 B	06/16/14 23:16 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	06/16/14 23:16 / dck
Antimony	0.0007	mg/L		0.0005		E200.8	06/26/14 03:30 / dck
Arsenic	0.031	mg/L		0.001		E200.8	06/16/14 23:16 / dck
Barium	0.011	mg/L		0.003		E200.8	06/16/14 23:16 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:16 / dck
Boron	0.6	mg/L		0.1		E200.8	06/19/14 20:11 / dck
Cadmium	0.00006	mg/L		0.00003		E200.8	06/16/14 23:16 / dck
Calcium	370	mg/L		1		E200.8	06/16/14 23:16 / dck
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:16 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:16 / dck
Copper	0.009	mg/L		0.001		E200.8	06/18/14 22:43 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 23:16 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:16 / dck
Magnesium	193	mg/L		1		E200.8	06/16/14 23:16 / dck
Manganese	ND	mg/L		0.001		E200.8	06/16/14 23:16 / dck
Mercury	7.1E-06	mg/L		5E-06		E245.1	06/11/14 12:52 / sbk
Molybdenum	0.054	mg/L		0.005		E200.8	06/16/14 23:16 / dck
Nickel	ND	mg/L		0.002		E200.8	06/16/14 23:16 / dck
Potassium	3	mg/L		1		E200.8	06/16/14 23:16 / dck
Selenium	0.014	mg/L		0.001		E200.8	06/16/14 23:16 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:16 / dck
Sodium	2380	mg/L		1		E200.8	06/19/14 20:11 / dck
Uranium	0.792	mg/L		0.0002		E200.8	06/16/14 23:16 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:16 / dck
Zinc	ND	mg/L		0.008		E200.8	06/16/14 23:16 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-008
Client Sample ID: LYP-07

Report Date: 07/09/14
Collection Date: 06/04/14 16:45
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	180	mg/L		4		A2320 B	06/06/14 13:31 / SRW
Bicarbonate as HCO3	210	mg/L		4		A2320 B	06/06/14 13:31 / SRW
Chloride	20	mg/L		1		E300.0	06/09/14 14:35 / SRW
Sulfate	160	mg/L		1		E300.0	06/09/14 14:35 / SRW
Hardness as CaCO3	270	mg/L		1		A2340 B	06/06/14 16:07 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:07 / sld
Antimony	0.0007	mg/L		0.0005		E200.8	06/26/14 03:34 / dck
Arsenic	0.003	mg/L		0.001		E200.8	06/16/14 23:33 / dck
Barium	0.057	mg/L		0.003		E200.8	06/16/14 23:33 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:33 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:07 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 23:33 / dck
Calcium	83	mg/L		1		E200.7	06/06/14 16:07 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:33 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:33 / dck
Copper	ND	mg/L		0.001		E200.8	06/16/14 23:33 / dck
Iron	0.03	mg/L		0.02		E200.8	06/16/14 23:33 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:33 / dck
Magnesium	15	mg/L		1		E200.7	06/06/14 16:07 / sld
Manganese	0.070	mg/L		0.001		E200.8	06/16/14 23:33 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/11/14 12:56 / sbk
Molybdenum	0.013	mg/L		0.005		E200.8	06/16/14 23:33 / dck
Nickel	0.003	mg/L		0.002		E200.8	06/18/14 22:47 / dck
Potassium	5	mg/L		1		E200.7	06/06/14 16:07 / sld
Selenium	0.002	mg/L		0.001		E200.8	06/16/14 23:33 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:33 / dck
Sodium	32	mg/L		1		E200.7	06/06/14 16:07 / sld
Uranium	0.0872	mg/L		0.0002		E200.8	06/16/14 23:33 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:33 / dck
Zinc	ND	mg/L		0.008		E200.8	06/16/14 23:33 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-009
Client Sample ID: LYS-05

Report Date: 07/09/14
Collection Date: 06/04/14 16:35
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Hardness as CaCO3	1720	mg/L		1		A2340 B	06/27/14 12:46 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:11 / sld
Antimony	0.0016	mg/L	D	0.0009		E200.8	06/16/14 23:38 / dck
Arsenic	0.018	mg/L		0.001		E200.8	06/16/14 23:38 / dck
Barium	0.015	mg/L		0.003		E200.8	06/16/14 23:38 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:38 / dck
Boron	2.0	mg/L		0.1		E200.7	06/06/14 16:11 / sld
Cadmium	0.00015	mg/L		0.00003		E200.8	06/16/14 23:38 / dck
Calcium	460	mg/L		1		E200.7	06/06/14 16:11 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:38 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:38 / dck
Copper	0.011	mg/L		0.001		E200.8	06/18/14 22:52 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 23:38 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:38 / dck
Magnesium	139	mg/L		1		E200.7	06/06/14 16:11 / sld
Manganese	0.001	mg/L		0.001		E200.8	06/16/14 23:38 / dck
Mercury	8.2E-06	mg/L		5E-06		E245.1	06/11/14 13:00 / sbk
Molybdenum	0.029	mg/L		0.005		E200.8	06/16/14 23:38 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 22:52 / dck
Potassium	22	mg/L		1		E200.7	06/06/14 16:11 / sld
Selenium	0.010	mg/L		0.001		E200.8	06/16/14 23:38 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:38 / dck
Sodium	1150	mg/L		1		E200.7	06/06/14 16:11 / sld
Uranium	1.89	mg/L		0.0002		E200.8	06/16/14 23:38 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:38 / dck
Zinc	0.013	mg/L		0.008		E200.8	06/16/14 23:38 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-010
Client Sample ID: LYS-04

Report Date: 07/09/14
Collection Date: 06/04/14 17:00
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Hardness as CaCO3	384	mg/L		1		A2340 B	06/27/14 12:46 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:15 / sld
Antimony	0.0013	mg/L		0.0005		E200.8	06/26/14 03:38 / dck
Arsenic	0.079	mg/L		0.001		E200.8	06/16/14 23:42 / dck
Barium	0.056	mg/L		0.003		E200.8	06/16/14 23:42 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/18/14 22:56 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:15 / sld
Cadmium	0.00004	mg/L		0.00003		E200.8	06/16/14 23:42 / dck
Calcium	98	mg/L		1		E200.7	06/06/14 16:15 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:42 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:42 / dck
Copper	0.006	mg/L		0.001		E200.8	06/18/14 22:56 / dck
Iron	ND	mg/L		0.02		E200.8	06/16/14 23:42 / dck
Lead	ND	mg/L		0.0003		E200.8	06/16/14 23:42 / dck
Magnesium	34	mg/L		1		E200.7	06/06/14 16:15 / sld
Manganese	ND	mg/L		0.001		E200.8	06/16/14 23:42 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/13/14 12:44 / sbk
Molybdenum	0.005	mg/L		0.005		E200.8	06/16/14 23:42 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 22:56 / dck
Potassium	12	mg/L		1		E200.7	06/06/14 16:15 / sld
Selenium	0.003	mg/L		0.001		E200.8	06/16/14 23:42 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:42 / dck
Sodium	150	mg/L		1		E200.7	06/06/14 16:15 / sld
Uranium	0.0247	mg/L		0.0002		E200.8	06/16/14 23:42 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:42 / dck
Zinc	0.009	mg/L		0.008		E200.8	06/16/14 23:42 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-011
Client Sample ID: MW-2D

Report Date: 07/09/14
Collection Date: 06/04/14 17:30
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	150	mg/L		4		A2320 B	06/06/14 14:17 / SRW
Bicarbonate as HCO3	180	mg/L		4		A2320 B	06/06/14 14:17 / SRW
Chloride	23	mg/L		1		E300.0	06/09/14 14:46 / SRW
Sulfate	190	mg/L		1		E300.0	06/09/14 14:46 / SRW
Hardness as CaCO3	301	mg/L		1		A2340 B	06/06/14 16:37 / abb
METALS, DISSOLVED							
Aluminum	0.513	mg/L		0.009		E200.7	06/06/14 16:37 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/26/14 03:43 / dck
Arsenic	0.007	mg/L		0.001		E200.8	06/16/14 23:47 / dck
Barium	0.048	mg/L		0.003		E200.8	06/16/14 23:47 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/16/14 23:47 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:37 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/16/14 23:47 / dck
Calcium	89	mg/L		1		E200.7	06/06/14 16:37 / sld
Chromium	ND	mg/L		0.01		E200.8	06/16/14 23:47 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/16/14 23:47 / dck
Copper	0.004	mg/L		0.001		E200.8	06/18/14 23:00 / dck
Iron	0.78	mg/L		0.02		E200.8	06/16/14 23:47 / dck
Lead	0.0013	mg/L		0.0003		E200.8	06/16/14 23:47 / dck
Magnesium	19	mg/L		1		E200.7	06/06/14 16:37 / sld
Manganese	0.048	mg/L		0.001		E200.8	06/16/14 23:47 / dck
Mercury	5.1E-06	mg/L		5E-06		E245.1	06/13/14 12:49 / sbk
Molybdenum	0.005	mg/L		0.005		E200.8	06/16/14 23:47 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 23:00 / dck
Potassium	4	mg/L		1		E200.7	06/06/14 16:37 / sld
Selenium	0.004	mg/L		0.001		E200.8	06/16/14 23:47 / dck
Silver	ND	mg/L		0.0002		E200.8	06/16/14 23:47 / dck
Sodium	28	mg/L		1		E200.7	06/06/14 16:37 / sld
Uranium	0.0481	mg/L		0.0002		E200.8	06/16/14 23:47 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/16/14 23:47 / dck
Zinc	0.011	mg/L		0.008		E200.8	06/16/14 23:47 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-012
Client Sample ID: MW-2C

Report Date: 07/09/14
Collection Date: 06/04/14 19:00
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	06/06/14 14:24 / SRW
Bicarbonate as HCO3	130	mg/L		4		A2320 B	06/06/14 14:24 / SRW
Chloride	18	mg/L		1		E300.0	06/09/14 15:19 / SRW
Sulfate	160	mg/L		1		E300.0	06/09/14 15:19 / SRW
Hardness as CaCO3	225	mg/L		1		A2340 B	06/06/14 16:41 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:41 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/17/14 00:04 / dck
Arsenic	0.006	mg/L		0.001		E200.8	06/17/14 00:04 / dck
Barium	0.018	mg/L		0.003		E200.8	06/17/14 00:04 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/17/14 00:04 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:41 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/17/14 00:04 / dck
Calcium	65	mg/L		1		E200.7	06/06/14 16:41 / sld
Chromium	ND	mg/L		0.01		E200.8	06/17/14 00:04 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/17/14 00:04 / dck
Copper	ND	mg/L		0.001		E200.8	06/17/14 00:04 / dck
Iron	ND	mg/L		0.02		E200.8	06/17/14 00:04 / dck
Lead	ND	mg/L		0.0003		E200.8	06/17/14 00:04 / dck
Magnesium	15	mg/L		1		E200.7	06/06/14 16:41 / sld
Manganese	ND	mg/L		0.001		E200.8	06/17/14 00:04 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/13/14 12:53 / sbk
Molybdenum	ND	mg/L		0.005		E200.8	06/17/14 00:04 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 23:18 / dck
Potassium	3	mg/L		1		E200.7	06/06/14 16:41 / sld
Selenium	0.002	mg/L		0.001		E200.8	06/17/14 00:04 / dck
Silver	ND	mg/L		0.0002		E200.8	06/17/14 00:04 / dck
Sodium	32	mg/L		1		E200.7	06/06/14 16:41 / sld
Uranium	0.0089	mg/L		0.0002		E200.8	06/17/14 00:04 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/17/14 00:04 / dck
Zinc	ND	mg/L		0.008		E200.8	06/17/14 00:04 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-013
Client Sample ID: 1GW-1056

Report Date: 07/09/14
Collection Date: 06/04/14 19:15
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	06/06/14 14:31 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	06/06/14 14:31 / SRW
Chloride	17	mg/L		1		E300.0	06/09/14 15:53 / SRW
Sulfate	190	mg/L		1		E300.0	06/09/14 15:53 / SRW
Hardness as CaCO3	272	mg/L		1		A2340 B	06/06/14 16:45 / abb
METALS, DISSOLVED							
Aluminum	0.027	mg/L		0.009		E200.7	06/06/14 16:45 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/26/14 03:47 / dck
Arsenic	0.007	mg/L		0.001		E200.8	06/17/14 00:09 / dck
Barium	0.031	mg/L		0.003		E200.8	06/17/14 00:09 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/17/14 00:09 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:45 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/17/14 00:09 / dck
Calcium	81	mg/L		1		E200.7	06/06/14 16:45 / sld
Chromium	ND	mg/L		0.01		E200.8	06/17/14 00:09 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/17/14 00:09 / dck
Copper	ND	mg/L		0.001		E200.8	06/17/14 00:09 / dck
Iron	0.02	mg/L		0.02		E200.8	06/17/14 00:09 / dck
Lead	ND	mg/L		0.0003		E200.8	06/17/14 00:09 / dck
Magnesium	17	mg/L		1		E200.7	06/06/14 16:45 / sld
Manganese	0.001	mg/L		0.001		E200.8	06/17/14 00:09 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/13/14 12:57 / sbk
Molybdenum	0.007	mg/L		0.005		E200.8	06/17/14 00:09 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 23:36 / dck
Potassium	3	mg/L		1		E200.7	06/06/14 16:45 / sld
Selenium	0.004	mg/L		0.001		E200.8	06/17/14 00:09 / dck
Silver	ND	mg/L		0.0002		E200.8	06/17/14 00:09 / dck
Sodium	28	mg/L		1		E200.7	06/06/14 16:45 / sld
Uranium	0.0461	mg/L		0.0002		E200.8	06/17/14 00:09 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/17/14 00:09 / dck
Zinc	ND	mg/L		0.008		E200.8	06/17/14 00:09 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-014
Client Sample ID: MW-2A

Report Date: 07/09/14
Collection Date: 06/04/14 20:45
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	06/06/14 14:38 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	06/06/14 14:38 / SRW
Chloride	4	mg/L		1		E300.0	06/09/14 16:04 / SRW
Sulfate	240	mg/L		1		E300.0	06/09/14 16:04 / SRW
Hardness as CaCO3	295	mg/L		1		A2340 B	06/06/14 16:49 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:49 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/26/14 03:52 / dck
Arsenic	0.011	mg/L		0.001		E200.8	06/17/14 00:13 / dck
Barium	0.013	mg/L		0.003		E200.8	06/17/14 00:13 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/17/14 00:13 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:49 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/17/14 00:13 / dck
Calcium	94	mg/L		1		E200.7	06/06/14 16:49 / sld
Chromium	ND	mg/L		0.01		E200.8	06/17/14 00:13 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/17/14 00:13 / dck
Copper	ND	mg/L		0.001		E200.8	06/17/14 00:13 / dck
Iron	ND	mg/L		0.02		E200.8	06/17/14 00:13 / dck
Lead	ND	mg/L		0.0003		E200.8	06/17/14 00:13 / dck
Magnesium	14	mg/L		1		E200.7	06/06/14 16:49 / sld
Manganese	ND	mg/L		0.001		E200.8	06/17/14 00:13 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/13/14 13:01 / sbk
Molybdenum	0.009	mg/L		0.005		E200.8	06/17/14 00:13 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 23:40 / dck
Potassium	4	mg/L		1		E200.7	06/06/14 16:49 / sld
Selenium	0.010	mg/L		0.001		E200.8	06/17/14 00:13 / dck
Silver	ND	mg/L		0.0002		E200.8	06/17/14 00:13 / dck
Sodium	28	mg/L		1		E200.7	06/06/14 16:49 / sld
Uranium	0.0457	mg/L		0.0002		E200.8	06/17/14 00:13 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/17/14 00:13 / dck
Zinc	ND	mg/L		0.008		E200.8	06/17/14 00:13 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-015
Client Sample ID: 1GW-1056 DUP

Report Date: 07/09/14
Collection Date: 06/04/14 19:15
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	06/06/14 14:44 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	06/06/14 14:44 / SRW
Chloride	17	mg/L		1		E300.0	06/09/14 16:15 / SRW
Sulfate	190	mg/L		1		E300.0	06/09/14 16:15 / SRW
Hardness as CaCO3	267	mg/L		1		A2340 B	06/06/14 16:52 / abb
METALS, DISSOLVED							
Aluminum	0.029	mg/L		0.009		E200.7	06/06/14 16:52 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/26/14 03:56 / dck
Arsenic	0.007	mg/L		0.001		E200.8	06/17/14 00:17 / dck
Barium	0.031	mg/L		0.003		E200.8	06/17/14 00:17 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/17/14 00:17 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:52 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/17/14 00:17 / dck
Calcium	80	mg/L		1		E200.7	06/06/14 16:52 / sld
Chromium	ND	mg/L		0.01		E200.8	06/17/14 00:17 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/17/14 00:17 / dck
Copper	ND	mg/L		0.001		E200.8	06/17/14 00:17 / dck
Iron	0.03	mg/L		0.02		E200.8	06/17/14 00:17 / dck
Lead	ND	mg/L		0.0003		E200.8	06/17/14 00:17 / dck
Magnesium	17	mg/L		1		E200.7	06/06/14 16:52 / sld
Manganese	0.001	mg/L		0.001		E200.8	06/17/14 00:17 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/13/14 13:05 / sbk
Molybdenum	0.007	mg/L		0.005		E200.8	06/17/14 00:17 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 23:44 / dck
Potassium	3	mg/L		1		E200.7	06/06/14 16:52 / sld
Selenium	0.004	mg/L		0.001		E200.8	06/17/14 00:17 / dck
Silver	ND	mg/L		0.0002		E200.8	06/17/14 00:17 / dck
Sodium	28	mg/L		1		E200.7	06/06/14 16:52 / sld
Uranium	0.0461	mg/L		0.0002		E200.8	06/17/14 00:17 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/17/14 00:17 / dck
Zinc	ND	mg/L		0.008		E200.8	06/17/14 00:17 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14060159-016
Client Sample ID: Field Blank

Report Date: 07/09/14
Collection Date: 06/04/14 19:20
DateReceived: 06/05/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	06/06/14 14:58 / SRW
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	06/06/14 14:58 / SRW
Chloride	ND	mg/L		1		E300.0	06/09/14 16:26 / SRW
Sulfate	ND	mg/L		1		E300.0	06/09/14 16:26 / SRW
Hardness as CaCO3	ND	mg/L		1		A2340 B	06/06/14 16:56 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	06/06/14 16:56 / sld
Antimony	ND	mg/L		0.0005		E200.8	06/26/14 04:00 / dck
Arsenic	ND	mg/L		0.001		E200.8	06/17/14 00:22 / dck
Barium	ND	mg/L		0.003		E200.8	06/17/14 00:22 / dck
Beryllium	ND	mg/L		0.0008		E200.8	06/17/14 00:22 / dck
Boron	ND	mg/L		0.1		E200.7	06/06/14 16:56 / sld
Cadmium	ND	mg/L		0.00003		E200.8	06/17/14 00:22 / dck
Calcium	ND	mg/L		1		E200.7	06/06/14 16:56 / sld
Chromium	ND	mg/L		0.01		E200.8	06/17/14 00:22 / dck
Cobalt	ND	mg/L		0.01		E200.8	06/17/14 00:22 / dck
Copper	ND	mg/L		0.001		E200.8	06/17/14 00:22 / dck
Iron	ND	mg/L		0.02		E200.8	06/17/14 00:22 / dck
Lead	ND	mg/L		0.0003		E200.8	06/17/14 00:22 / dck
Magnesium	ND	mg/L		1		E200.7	06/06/14 16:56 / sld
Manganese	ND	mg/L		0.001		E200.8	06/17/14 00:22 / dck
Mercury	ND	mg/L		5E-06		E245.1	06/13/14 13:10 / sbk
Molybdenum	ND	mg/L		0.005		E200.8	06/17/14 00:22 / dck
Nickel	ND	mg/L		0.002		E200.8	06/18/14 23:49 / dck
Potassium	ND	mg/L		1		E200.7	06/06/14 16:56 / sld
Selenium	ND	mg/L		0.001		E200.8	06/17/14 00:22 / dck
Silver	ND	mg/L		0.0002		E200.8	06/17/14 00:22 / dck
Sodium	ND	mg/L		1		E200.7	06/06/14 16:56 / sld
Uranium	ND	mg/L		0.0002		E200.8	06/17/14 00:22 / dck
Vanadium	ND	mg/L		0.1		E200.8	06/17/14 00:22 / dck
Zinc	ND	mg/L		0.008		E200.8	06/17/14 00:22 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B										Batch: R97750
Lab ID: MB		Method Blank				Run: PHSC_101-H_140606A			06/06/14 11:53	
Alkalinity, Total as CaCO3		2	mg/L	0.9						
Lab ID: LCS		Laboratory Control Sample				Run: PHSC_101-H_140606A			06/06/14 11:59	
Alkalinity, Total as CaCO3		580	mg/L	4.0	97	90	110			
Lab ID: H14060106-016AMS		Sample Matrix Spike				Run: PHSC_101-H_140606A			06/06/14 12:17	
Alkalinity, Total as CaCO3		670	mg/L	4.0	99	80	120			
Lab ID: H14060107-003BDUP	2	Sample Duplicate				Run: PHSC_101-H_140606A			06/06/14 12:37	
Alkalinity, Total as CaCO3		140	mg/L	4.0				0.7	10	
Bicarbonate as HCO3		170	mg/L	4.0				0.7	10	
Lab ID: H14060159-015ADUP	2	Sample Duplicate				Run: PHSC_101-H_140606A			06/06/14 14:51	
Alkalinity, Total as CaCO3		120	mg/L	4.0				1.1	10	
Bicarbonate as HCO3		150	mg/L	4.0				1.1	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP2-HE_140606C	
Lab ID: ICV	6	Initial Calibration Verification Standard							06/06/14 13:29	
Aluminum		4.07	mg/L	0.10	102	95	105			
Boron		0.794	mg/L	0.10	99	95	105			
Calcium		39.7	mg/L	1.0	99	95	105			
Magnesium		40.0	mg/L	1.0	100	95	105			
Potassium		40.4	mg/L	1.0	101	95	105			
Sodium		40.8	mg/L	1.0	102	95	105			
Lab ID: CCV-1	6	Continuing Calibration Verification Standard							06/06/14 14:03	
Aluminum		2.55	mg/L	0.10	102	95	105			
Boron		2.48	mg/L	0.10	99	95	105			
Calcium		25.3	mg/L	1.0	101	95	105			
Magnesium		25.7	mg/L	1.0	103	95	105			
Potassium		25.8	mg/L	1.0	103	95	105			
Sodium		25.9	mg/L	1.0	103	95	105			
Lab ID: ICSA	6	Interference Check Sample A							06/06/14 14:14	
Aluminum		532	mg/L	0.10	106	80	120			
Boron		0.00673	mg/L	0.10		0	0			
Calcium		477	mg/L	1.0	95	80	120			
Magnesium		521	mg/L	1.0	104	80	120			
Potassium		-0.115	mg/L	1.0		0	0			
Sodium		-0.0125	mg/L	1.0		0	0			
Lab ID: ICSAB	6	Interference Check Sample AB							06/06/14 14:19	
Aluminum		521	mg/L	0.10	104	80	120			
Boron		0.962	mg/L	0.10	96	80	120			
Calcium		461	mg/L	1.0	92	80	120			
Magnesium		517	mg/L	1.0	103	80	120			
Potassium		19.8	mg/L	1.0	99	80	120			
Sodium		20.0	mg/L	1.0	100	80	120			
Lab ID: CCV	6	Continuing Calibration Verification Standard							06/06/14 15:34	
Aluminum		2.55	mg/L	0.10	102	90	110			
Boron		2.37	mg/L	0.10	95	90	110			
Calcium		24.2	mg/L	1.0	97	90	110			
Magnesium		23.9	mg/L	1.0	96	90	110			
Potassium		24.9	mg/L	1.0	100	90	110			
Sodium		25.2	mg/L	1.0	101	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard							06/06/14 16:19	
Aluminum		2.53	mg/L	0.10	101	90	110			
Boron		2.39	mg/L	0.10	96	90	110			
Calcium		24.4	mg/L	1.0	97	90	110			
Magnesium		24.2	mg/L	1.0	97	90	110			
Potassium		24.9	mg/L	1.0	99	90	110			
Sodium		25.1	mg/L	1.0	100	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14
Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E200.7**									Analytical Run: ICP2-HE_140606C	
Lab ID:	**CCV**	6	Continuing Calibration Verification Standard							06/06/14 16:19	
Method:	**E200.7**									Batch: R97835	
Lab ID:	**ICB**	6	Method Blank				Run: ICP2-HE_140606C			06/06/14 14:26	
Aluminum			0.006	mg/L	0.002						
Boron			ND	mg/L	0.002						
Calcium			0.04	mg/L	0.03						
Magnesium			ND	mg/L	0.04						
Potassium			ND	mg/L	0.04						
Sodium			ND	mg/L	0.02						
Lab ID:	**LFB**	6	Laboratory Fortified Blank				Run: ICP2-HE_140606C			06/06/14 14:30	
Aluminum			4.90	mg/L	0.10	98	85	115			
Boron			0.931	mg/L	0.10	93	85	115			
Calcium			48.1	mg/L	1.0	96	85	115			
Magnesium			49.1	mg/L	1.0	98	85	115			
Potassium			48.7	mg/L	1.0	97	85	115			
Sodium			49.0	mg/L	1.0	98	85	115			
Lab ID:	**H14060102-001AMS2**	6	Sample Matrix Spike				Run: ICP2-HE_140606C			06/06/14 15:41	
Aluminum			5.09	mg/L	0.030	102	70	130			
Boron			1.04	mg/L	0.050	94	70	130			
Calcium			75.8	mg/L	1.0	94	70	130			
Magnesium			55.6	mg/L	1.0	99	70	130			
Potassium			57.6	mg/L	1.0	101	70	130			
Sodium			79.5	mg/L	1.0	102	70	130			
Lab ID:	**H14060102-001AMSD**	6	Sample Matrix Spike Duplicate				Run: ICP2-HE_140606C			06/06/14 15:45	
Aluminum			5.13	mg/L	0.030	102	70	130	0.7	20	
Boron			1.02	mg/L	0.050	93	70	130	1.8	20	
Calcium			76.0	mg/L	1.0	95	70	130	0.3	20	
Magnesium			56.4	mg/L	1.0	100	70	130	1.4	20	
Potassium			57.5	mg/L	1.0	101	70	130	0.2	20	
Sodium			79.5	mg/L	1.0	102	70	130	0.1	20	
Lab ID:	**MB-24835**	6	Method Blank				Run: ICP2-HE_140606C			06/06/14 15:48	
Aluminum			ND	mg/L	0.0090						
Boron			0.00265	mg/L	0.10						
Calcium			0.0440	mg/L	1.0						
Magnesium			ND	mg/L	1.0						
Potassium			ND	mg/L	1.0						
Sodium			ND	mg/L	1.0						
Lab ID:	**H14060159-010BMS2**	6	Sample Matrix Spike				Run: ICP2-HE_140606C			06/06/14 16:30	
Aluminum			5.21	mg/L	0.030	104	70	130			
Boron			1.05	mg/L	0.050	97	70	130			
Calcium			150	mg/L	1.0	103	70	130			

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Report Date: 07/09/14
Project: Silver Bow Creek Monitoring
Work Order: H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R97835
Lab ID: H14060159-010BMS2	6	Sample Matrix Spike				Run: ICP2-HE_140606C			06/06/14 16:30	
Magnesium		86.5	mg/L	1.0	105	70	130			
Potassium		63.2	mg/L	1.0	102	70	130			
Sodium		198	mg/L	1.0	96	70	130			
Lab ID: H14060159-010BMSD	6	Sample Matrix Spike Duplicate				Run: ICP2-HE_140606C			06/06/14 16:34	
Aluminum		5.19	mg/L	0.030	104	70	130	0.5	20	
Boron		1.05	mg/L	0.050	97	70	130	0.6	20	
Calcium		149	mg/L	1.0	101	70	130	0.6	20	
Magnesium		86.0	mg/L	1.0	104	70	130	0.6	20	
Potassium		62.5	mg/L	1.0	101	70	130	1.2	20	
Sodium		198	mg/L	1.0	96	70	130	0.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140616B		
Lab ID: ICV STD	23	Initial Calibration Verification Standard							06/16/14 18:58	
Aluminum		0.302	mg/L	0.10	101	90	110			
Antimony		0.0594	mg/L	0.050	99	90	110			
Arsenic		0.0601	mg/L	0.0050	100	90	110			
Barium		0.0591	mg/L	0.10	99	90	110			
Beryllium		0.0306	mg/L	0.0010	102	90	110			
Cadmium		0.0316	mg/L	0.0010	105	90	110			
Calcium		3.06	mg/L	0.50	102	90	110			
Chromium		0.0610	mg/L	0.010	102	90	110			
Cobalt		0.0600	mg/L	0.010	100	90	110			
Copper		0.0620	mg/L	0.010	103	90	110			
Iron		0.309	mg/L	0.020	103	90	110			
Lead		0.0596	mg/L	0.010	99	90	110			
Magnesium		3.06	mg/L	0.50	102	90	110			
Manganese		0.298	mg/L	0.010	99	90	110			
Molybdenum		0.0609	mg/L	0.0050	102	90	110			
Nickel		0.0613	mg/L	0.010	102	90	110			
Potassium		3.05	mg/L	0.50	102	90	110			
Selenium		0.0606	mg/L	0.0050	101	90	110			
Silver		0.0305	mg/L	0.0050	102	90	110			
Sodium		3.06	mg/L	0.50	102	90	110			
Uranium		0.0597	mg/L	0.0010	99	90	110			
Vanadium		0.0594	mg/L	0.10	99	90	110			
Zinc		0.0631	mg/L	0.010	105	90	110			
Lab ID: ICSA	23	Interference Check Sample A							06/16/14 19:03	
Aluminum		39.7	mg/L	0.10	99	70	130			
Antimony		0.000102	mg/L	0.050						
Arsenic		0.000238	mg/L	0.0050						
Barium		0.000187	mg/L	0.10						
Beryllium		1.00E-06	mg/L	0.0010						
Cadmium		0.000369	mg/L	0.0010						
Calcium		118	mg/L	0.50	99	70	130			
Chromium		0.00115	mg/L	0.010						
Cobalt		0.000229	mg/L	0.010						
Copper		0.000324	mg/L	0.010						
Iron		98.8	mg/L	0.020	99	70	130			
Lead		0.000254	mg/L	0.010						
Magnesium		40.8	mg/L	0.50	102	70	130			
Manganese		0.000198	mg/L	0.010						
Molybdenum		0.852	mg/L	0.0050	106	70	130			
Nickel		-0.000821	mg/L	0.010						
Potassium		41.2	mg/L	0.50	103	70	130			
Selenium		0.000671	mg/L	0.0050						
Silver		0.000289	mg/L	0.0050						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140616B	
Lab ID: ICSA	23	Interference Check Sample A							06/16/14 19:03	
Sodium		102	mg/L	0.50	102	70	130			
Uranium		4.00E-05	mg/L	0.0010						
Vanadium		5.60E-05	mg/L	0.10						
Zinc		0.00156	mg/L	0.010						
Lab ID: ICSAB	23	Interference Check Sample AB							06/16/14 19:07	
Aluminum		40.4	mg/L	0.10	101	70	130			
Antimony		0.000147	mg/L	0.050		0	0			
Arsenic		0.0106	mg/L	0.0050	106	70	130			
Barium		0.000220	mg/L	0.10		0	0			
Beryllium		1.30E-05	mg/L	0.0010		0	0			
Cadmium		0.00987	mg/L	0.0010	99	70	130			
Calcium		119	mg/L	0.50	99	70	130			
Chromium		0.0220	mg/L	0.010	110	70	130			
Cobalt		0.0206	mg/L	0.010	103	70	130			
Copper		0.0208	mg/L	0.010	104	70	130			
Iron		99.8	mg/L	0.020	100	70	130			
Lead		0.000357	mg/L	0.010		0	0			
Magnesium		40.8	mg/L	0.50	102	70	130			
Manganese		0.0207	mg/L	0.010	103	70	130			
Molybdenum		0.876	mg/L	0.0050	109	70	130			
Nickel		0.0197	mg/L	0.010	98	70	130			
Potassium		42.0	mg/L	0.50	105	70	130			
Selenium		0.0105	mg/L	0.0050	105	70	130			
Silver		0.0191	mg/L	0.0050	96	70	130			
Sodium		104	mg/L	0.50	104	70	130			
Uranium		7.50E-05	mg/L	0.0010		0	0			
Vanadium		0.0212	mg/L	0.10	106	70	130			
Zinc		0.0116	mg/L	0.010	116	70	130			
Method: E200.8										Batch: R98050
Lab ID: ICB	23	Method Blank				Run: ICPMS204-B_140616B			06/16/14 19:29	
Aluminum		0.0004	mg/L	0.0002						
Antimony		ND	mg/L	1E-05						
Arsenic		ND	mg/L	3E-05						
Barium		7E-05	mg/L	3E-05						
Beryllium		ND	mg/L	2E-05						
Cadmium		ND	mg/L	6E-06						
Calcium		ND	mg/L	0.005						
Chromium		ND	mg/L	3E-05						
Cobalt		ND	mg/L	2E-05						
Copper		ND	mg/L	3E-05						
Iron		0.001	mg/L	0.0002						
Lead		ND	mg/L	8E-06						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R98050
Lab ID: ICB	23	Method Blank				Run: ICPMS204-B_140616B				06/16/14 19:29
Magnesium		0.0007	mg/L	0.0006						
Manganese		ND	mg/L	2E-05						
Molybdenum		3E-05	mg/L	3E-05						
Nickel		ND	mg/L	6E-05						
Potassium		ND	mg/L	0.05						
Selenium		ND	mg/L	7E-05						
Silver		ND	mg/L	3E-05						
Sodium		ND	mg/L	0.008						
Uranium		ND	mg/L	6E-06						
Vanadium		ND	mg/L	3E-05						
Zinc		0.0004	mg/L	0.0003						
Lab ID: LFB	23	Laboratory Fortified Blank				Run: ICPMS204-B_140616B				06/16/14 19:34
Aluminum		0.0498	mg/L	0.10	99	85	115			
Antimony		0.0503	mg/L	0.050	101	85	115			
Arsenic		0.0517	mg/L	0.0050	103	85	115			
Barium		0.0499	mg/L	0.10	100	85	115			
Beryllium		0.0505	mg/L	0.0010	101	85	115			
Cadmium		0.0520	mg/L	0.0010	104	85	115			
Calcium		1.11	mg/L	0.50	111	85	115			
Chromium		0.0515	mg/L	0.010	103	85	115			
Cobalt		0.0506	mg/L	0.010	101	85	115			
Copper		0.0528	mg/L	0.010	106	85	115			
Iron		0.153	mg/L	0.020	101	85	115			
Lead		0.0505	mg/L	0.010	101	85	115			
Magnesium		1.02	mg/L	0.50	102	85	115			
Manganese		0.0509	mg/L	0.010	102	85	115			
Molybdenum		0.0510	mg/L	0.0050	102	85	115			
Nickel		0.0516	mg/L	0.010	103	85	115			
Potassium		1.06	mg/L	0.50	106	85	115			
Selenium		0.0523	mg/L	0.0050	105	85	115			
Silver		0.0192	mg/L	0.0050	96	85	115			
Sodium		1.01	mg/L	0.50	101	85	115			
Uranium		0.0488	mg/L	0.0010	98	85	115			
Vanadium		0.0505	mg/L	0.10	101	85	115			
Zinc		0.0555	mg/L	0.010	110	85	115			
Lab ID: H14060159-007BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140616B				06/16/14 23:20
Aluminum		0.0483	mg/L	0.030	92	70	130			
Antimony		0.0509	mg/L	0.0010	99	70	130			
Arsenic		0.0831	mg/L	0.0010	104	70	130			
Barium		0.0611	mg/L	0.050	100	70	130			
Beryllium		0.0425	mg/L	0.0010	85	70	130			
Cadmium		0.0396	mg/L	0.0010	79	70	130			
Calcium		364	mg/L	1.0		70	130			A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R98050	
Lab ID: H14060159-007BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140616B			06/16/14 23:20	
Chromium		0.0531	mg/L	0.0050	102	70	130			
Cobalt		0.0482	mg/L	0.0050	95	70	130			
Copper		0.0556	mg/L	0.0050	93	70	130			
Iron		0.156	mg/L	0.020	98	70	130			
Lead		0.0514	mg/L	0.0010	103	70	130			
Magnesium		187	mg/L	1.0		70	130			A
Manganese		0.0510	mg/L	0.0010	101	70	130			
Molybdenum		0.108	mg/L	0.0010	108	70	130			
Nickel		0.0463	mg/L	0.0050	93	70	130			
Potassium		3.85	mg/L	1.0	114	70	130			
Selenium		0.0710	mg/L	0.0010	113	70	130			
Silver		0.0164	mg/L	0.0010	82	70	130			
Sodium		2270	mg/L	1.0		70	130			A
Uranium		0.839	mg/L	0.00030		70	130			A
Vanadium		0.0833	mg/L	0.010	106	70	130			
Zinc		0.0493	mg/L	0.010	89	70	130			
Lab ID: H14060159-007BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140616B			06/16/14 23:25	
Aluminum		0.0474	mg/L	0.030	90	70	130	1.9	20	
Antimony		0.0500	mg/L	0.0010	98	70	130	1.7	20	
Arsenic		0.0834	mg/L	0.0010	105	70	130	0.3	20	
Barium		0.0612	mg/L	0.050	100	70	130	0.3	20	
Beryllium		0.0422	mg/L	0.0010	84	70	130	0.7	20	
Cadmium		0.0394	mg/L	0.0010	79	70	130	0.6	20	
Calcium		368	mg/L	1.0		70	130	1.1	20	A
Chromium		0.0527	mg/L	0.0050	101	70	130	0.7	20	
Cobalt		0.0479	mg/L	0.0050	94	70	130	0.7	20	
Copper		0.0555	mg/L	0.0050	93	70	130	0.2	20	
Iron		0.154	mg/L	0.020	96	70	130	1.2	20	
Lead		0.0508	mg/L	0.0010	102	70	130	1.1	20	
Magnesium		187	mg/L	1.0		70	130	0.1	20	A
Manganese		0.0512	mg/L	0.0010	101	70	130	0.4	20	
Molybdenum		0.107	mg/L	0.0010	107	70	130	0.6	20	
Nickel		0.0462	mg/L	0.0050	92	70	130	0.2	20	
Potassium		3.87	mg/L	1.0	116	70	130	0.5	20	
Selenium		0.0706	mg/L	0.0010	112	70	130	0.6	20	
Silver		0.0164	mg/L	0.0010	82	70	130	0.1	20	
Sodium		2270	mg/L	1.0		70	130	0.2	20	A
Uranium		0.827	mg/L	0.00030		70	130	1.5	20	A
Vanadium		0.0832	mg/L	0.010	106	70	130	0.1	20	
Zinc		0.0492	mg/L	0.010	89	70	130	0.2	20	
Lab ID: H14060186-006AMS	23	Sample Matrix Spike				Run: ICPMS204-B_140616B			06/17/14 01:19	
Aluminum		0.0953	mg/L	0.030	104	70	130			
Antimony		0.0515	mg/L	0.0010	102	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R98050
Lab ID: H14060186-006AMS	23	Sample Matrix Spike				Run: ICPMS204-B_140616B			06/17/14 01:19	
Arsenic		0.0534	mg/L	0.0010	105	70	130			
Barium		0.0723	mg/L	0.050	100	70	130			
Beryllium		0.0516	mg/L	0.0010	103	70	130			
Cadmium		0.0480	mg/L	0.0010	96	70	130			
Calcium		27.3	mg/L	1.0		70	130			A
Chromium		0.0518	mg/L	0.0050	103	70	130			
Cobalt		0.0485	mg/L	0.0050	97	70	130			
Copper		0.0514	mg/L	0.0050	102	70	130			
Iron		0.190	mg/L	0.020	103	70	130			
Lead		0.0506	mg/L	0.0010	101	70	130			
Magnesium		5.83	mg/L	1.0		70	130			A
Manganese		0.0542	mg/L	0.0010	102	70	130			
Molybdenum		0.0540	mg/L	0.0010	106	70	130			
Nickel		0.0494	mg/L	0.0050	99	70	130			
Potassium		1.91	mg/L	1.0	109	70	130			
Selenium		0.0512	mg/L	0.0010	102	70	130			
Silver		0.0190	mg/L	0.0010	95	70	130			
Sodium		3.42	mg/L	1.0	99	70	130			
Uranium		0.0506	mg/L	0.00030	99	70	130			
Vanadium		0.0515	mg/L	0.010	102	70	130			
Zinc		0.0538	mg/L	0.010	101	70	130			
Lab ID: H14060186-006AMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140616B			06/17/14 01:23	
Aluminum		0.121	mg/L	0.030	156	70	130	24	20	SR
Antimony		0.0518	mg/L	0.0010	102	70	130	0.6	20	
Arsenic		0.0536	mg/L	0.0010	105	70	130	0.4	20	
Barium		0.0731	mg/L	0.050	102	70	130	1.1	20	
Beryllium		0.0524	mg/L	0.0010	105	70	130	1.5	20	
Cadmium		0.0485	mg/L	0.0010	97	70	130	1.0	20	
Calcium		27.6	mg/L	1.0		70	130	0.9	20	A
Chromium		0.0518	mg/L	0.0050	103	70	130	0.1	20	
Cobalt		0.0487	mg/L	0.0050	97	70	130	0.3	20	
Copper		0.0518	mg/L	0.0050	103	70	130	0.7	20	
Iron		0.210	mg/L	0.020	117	70	130	10	20	
Lead		0.0510	mg/L	0.0010	102	70	130	0.8	20	
Magnesium		5.99	mg/L	1.0		70	130	2.8	20	A
Manganese		0.0554	mg/L	0.0010	104	70	130	2.2	20	
Molybdenum		0.0542	mg/L	0.0010	106	70	130	0.3	20	
Nickel		0.0501	mg/L	0.0050	100	70	130	1.4	20	
Potassium		1.89	mg/L	1.0	107	70	130	1.3	20	
Selenium		0.0523	mg/L	0.0010	104	70	130	2.1	20	
Silver		0.0204	mg/L	0.0010	102	70	130	7.1	20	
Sodium		3.45	mg/L	1.0	102	70	130	0.8	20	
Uranium		0.0510	mg/L	0.00030	100	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

R - RPD exceeds advisory limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Report Date: 07/09/14
Project: Silver Bow Creek Monitoring
Work Order: H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**										Batch: R98050
Lab ID: **H14060186-006AMSD**	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140616B			06/17/14 01:23	
Vanadium		0.0520	mg/L	0.010	103	70	130	0.9	20	
Zinc		0.0533	mg/L	0.010	100	70	130	1.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14
Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140619A	
Lab ID: ICV STD	5	Initial Calibration Verification Standard							06/18/14 11:49	
Aluminum		0.297	mg/L	0.10	99	90	110			
Beryllium		0.0302	mg/L	0.0010	101	90	110			
Cadmium		0.0314	mg/L	0.0010	105	90	110			
Copper		0.0610	mg/L	0.010	102	90	110			
Nickel		0.0613	mg/L	0.010	102	90	110			
Lab ID: ICSA	5	Interference Check Sample A							06/18/14 11:53	
Aluminum		38.9	mg/L	0.10	97	70	130			
Beryllium		3.00E-06	mg/L	0.0010						
Cadmium		0.000341	mg/L	0.0010						
Copper		0.000390	mg/L	0.010						
Nickel		-1.00E-05	mg/L	0.010						
Lab ID: ICSAB	5	Interference Check Sample AB							06/18/14 11:58	
Aluminum		38.9	mg/L	0.10	97	70	130			
Beryllium		-5.00E-06	mg/L	0.0010		0	0			
Cadmium		0.00941	mg/L	0.0010	94	70	130			
Copper		0.0207	mg/L	0.010	104	70	130			
Nickel		0.0205	mg/L	0.010	102	70	130			
Lab ID: ICV STD	5	Initial Calibration Verification Standard							06/18/14 21:46	
Aluminum		0.305	mg/L	0.10	102	90	110			
Beryllium		0.0310	mg/L	0.0010	103	90	110			
Cadmium		0.0315	mg/L	0.0010	105	90	110			
Copper		0.0629	mg/L	0.010	105	90	110			
Nickel		0.0622	mg/L	0.010	104	90	110			
Lab ID: ICSA	5	Interference Check Sample A							06/18/14 21:50	
Aluminum		39.4	mg/L	0.10	99	70	130			
Beryllium		1.70E-05	mg/L	0.0010						
Cadmium		0.000362	mg/L	0.0010						
Copper		0.000358	mg/L	0.010						
Nickel		0.000616	mg/L	0.010						
Lab ID: ICSAB	5	Interference Check Sample AB							06/18/14 21:54	
Aluminum		40.2	mg/L	0.10	100	70	130			
Beryllium		1.40E-05	mg/L	0.0010		0	0			
Cadmium		0.00941	mg/L	0.0010	94	70	130			
Copper		0.0207	mg/L	0.010	104	70	130			
Nickel		0.0212	mg/L	0.010	106	70	130			
Method: E200.8										Batch: R98112
Lab ID: ICB	5	Method Blank				Run: ICPMS204-B_140619A			06/18/14 12:40	
Aluminum		0.0008	mg/L	0.0002						
Beryllium		ND	mg/L	2E-05						
Cadmium		ND	mg/L	6E-06						

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14
Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E200.8**										Batch: R98112
Lab ID:	**ICB**	5	Method Blank				Run: ICPMS204-B_140619A				06/18/14 12:40
Copper			3E-05	mg/L	3E-05						
Nickel			ND	mg/L	6E-05						
Lab ID:	**LFB**	5	Laboratory Fortified Blank				Run: ICPMS204-B_140619A				06/18/14 12:45
Aluminum			0.0498	mg/L	0.10	98	85	115			
Beryllium			0.0508	mg/L	0.0010	102	85	115			
Cadmium			0.0522	mg/L	0.0010	104	85	115			
Copper			0.0536	mg/L	0.010	107	85	115			
Nickel			0.0529	mg/L	0.010	106	85	115			
Lab ID:	**H14060159-012BMS**	5	Sample Matrix Spike				Run: ICPMS204-B_140619A				06/18/14 23:22
Aluminum			0.0519	mg/L	0.030	96	70	130			
Beryllium			0.0492	mg/L	0.0010	99	70	130			
Cadmium			0.0472	mg/L	0.0010	94	70	130			
Copper			0.0516	mg/L	0.0050	102	70	130			
Nickel			0.0509	mg/L	0.0050	102	70	130			
Lab ID:	**H14060256-001BMS**	5	Sample Matrix Spike				Run: ICPMS204-B_140619A				06/18/14 23:58
Aluminum			0.0604	mg/L	0.030	101	70	130			
Beryllium			0.0527	mg/L	0.0010	105	70	130			
Cadmium			0.0503	mg/L	0.0010	101	70	130			
Copper			0.0522	mg/L	0.0050	104	70	130			
Nickel			0.0513	mg/L	0.0050	103	70	130			
Lab ID:	**H14060256-001BMSD**	5	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140619A				06/19/14 00:02
Aluminum			0.0594	mg/L	0.030	100	70	130	1.6	20	
Beryllium			0.0522	mg/L	0.0010	104	70	130	0.9	20	
Cadmium			0.0501	mg/L	0.0010	100	70	130	0.5	20	
Copper			0.0519	mg/L	0.0050	103	70	130	0.7	20	
Nickel			0.0513	mg/L	0.0050	103	70	130	0.1	20	
Lab ID:	**H14060159-012BMSD**	5	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140619A				06/19/14 10:05
Aluminum			0.0527	mg/L	0.030	97	70	130	1.5	20	
Beryllium			0.0482	mg/L	0.0010	96	70	130	2.1	20	
Cadmium			0.0449	mg/L	0.0010	90	70	130	5.0	20	
Copper			0.0486	mg/L	0.0050	96	70	130	6.0	20	
Nickel			0.0479	mg/L	0.0050	96	70	130	6.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E200.8**								Analytical Run: ICPMS204-B_140619C		
Lab ID:	**ICV STD**	2	Initial Calibration Verification Standard							06/19/14 17:41	
Boron			0.0615	mg/L	0.10	102	90	110			
Sodium			3.06	mg/L	0.50	102	90	110			
Lab ID:	**ICSA**	2	Interference Check Sample A							06/19/14 17:46	
Boron			0.00420	mg/L	0.10						
Sodium			101	mg/L	0.50	101	70	130			
Lab ID:	**ICSAB**	2	Interference Check Sample AB							06/19/14 17:50	
Boron			0.00332	mg/L	0.10		0	0			
Sodium			103	mg/L	0.50	103	70	130			
Method:	**E200.8**										Batch: R98186
Lab ID:	**ICB**	2	Method Blank				Run: ICPMS204-B_140619C			06/19/14 18:13	
Boron			ND	mg/L	0.0002						
Sodium			ND	mg/L	0.008						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: ICPMS204-B_140619C			06/19/14 18:17	
Boron			0.0498	mg/L	0.10	100	85	115			
Sodium			1.03	mg/L	0.50	103	85	115			
Lab ID:	**H14060159-004BMS**	2	Sample Matrix Spike				Run: ICPMS204-B_140619C			06/19/14 19:53	
Boron			0.439	mg/L	0.050	102	70	130			
Sodium			244	mg/L	1.0		70	130			A
Lab ID:	**H14060159-004BMSD**	2	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140619C			06/19/14 19:57	
Boron			0.431	mg/L	0.050	99	70	130	1.9	20	
Sodium			244	mg/L	1.0		70	130	0.2	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14
Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140625B	
Lab ID: ICV STD		Initial Calibration Verification Standard								06/25/14 10:57
Antimony		0.0614	mg/L	0.050	102	90	110			
Lab ID: ICSA		Interference Check Sample A								06/25/14 11:01
Antimony		0.000101	mg/L	0.050						
Lab ID: ICSAB		Interference Check Sample AB								06/25/14 11:06
Antimony		0.000153	mg/L	0.050		0	0			
Lab ID: ICV STD		Initial Calibration Verification Standard								06/25/14 14:43
Antimony		0.0605	mg/L	0.050	101	90	110			
Lab ID: ICSA		Interference Check Sample A								06/25/14 14:47
Antimony		7.70E-05	mg/L	0.050						
Lab ID: ICSAB		Interference Check Sample AB								06/25/14 14:51
Antimony		0.000115	mg/L	0.050		0	0			
Lab ID: ICSA		Interference Check Sample A								06/26/14 01:30
Antimony		6.00E-05	mg/L	0.050						
Lab ID: ICSAB		Interference Check Sample AB								06/26/14 01:34
Antimony		0.000103	mg/L	0.050		0	0			
Method: E200.8										Batch: R98370
Lab ID: ICB		Method Blank				Run: ICPMS204-B_140625B				06/26/14 01:56
Antimony		ND	mg/L	1E-05						
Lab ID: LFB		Laboratory Fortified Blank				Run: ICPMS204-B_140625B				06/26/14 02:01
Antimony		0.0506	mg/L	0.050	101	85	115			
Lab ID: MB-25059		Method Blank				Run: ICPMS204-B_140625B				06/26/14 02:14
Antimony		ND	mg/L	0.00050						
Lab ID: H14060159-003BMS		Sample Matrix Spike				Run: ICPMS204-B_140625B				06/26/14 03:16
Antimony		0.0504	mg/L	0.0010	100	70	130			
Lab ID: H14060159-003BMSD		Sample Matrix Spike Duplicate				Run: ICPMS204-B_140625B				06/26/14 03:21
Antimony		0.0505	mg/L	0.0010	101	70	130	0.2	20	
Lab ID: H14060392-001BMS		Sample Matrix Spike				Run: ICPMS204-B_140625B				06/26/14 04:23
Antimony		0.0518	mg/L	0.0010	103	70	130			
Lab ID: H14060392-001BMSD		Sample Matrix Spike Duplicate				Run: ICPMS204-B_140625B				06/26/14 04:27
Antimony		0.0516	mg/L	0.0010	103	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140703B	
Lab ID: ICV STD		Initial Calibration Verification Standard							07/03/14 16:44	
Antimony		0.0581	mg/L	0.050	97	90	110			
Lab ID: ICSA		Interference Check Sample A							07/03/14 16:49	
Antimony		0.000147	mg/L	0.050						
Lab ID: ICSAB		Interference Check Sample AB							07/03/14 16:53	
Antimony		0.000137	mg/L	0.050		0	0			
Method: E200.8									Batch: R98616	
Lab ID: ICB		Method Blank				Run: ICPMS204-B_140703B			07/03/14 18:01	
Antimony		ND	mg/L	1E-05						
Lab ID: LFB		Laboratory Fortified Blank				Run: ICPMS204-B_140703B			07/03/14 18:05	
Antimony		0.0490	mg/L	0.050	98	85	115			
Lab ID: MB-25059		Method Blank				Run: ICPMS204-B_140703B			07/03/14 18:19	
Antimony		2.77E-05	mg/L	0.00050						
Lab ID: H14060575-001BMS		Sample Matrix Spike				Run: ICPMS204-B_140703B			07/03/14 21:07	
Antimony		0.0512	mg/L	0.0010	95	70	130			
Lab ID: H14060575-001BMSD		Sample Matrix Spike Duplicate				Run: ICPMS204-B_140703B			07/03/14 21:11	
Antimony		0.0522	mg/L	0.0010	97	70	130	1.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1								Analytical Run: HGCV202-H_140611A		
Lab ID: ICV		Initial Calibration Verification Standard							06/11/14 09:42	
Mercury		0.00019	mg/L	0.00010	97	90	110			
Lab ID: CCV1		Continuing Calibration Verification Standard							06/11/14 09:47	
Mercury		0.00021	mg/L	0.00010	104	95	105			
Lab ID: CCV		Continuing Calibration Verification Standard							06/11/14 10:58	
Mercury		0.00021	mg/L	0.00010	104	90	110			
Lab ID: ICV		Initial Calibration Verification Standard							06/11/14 09:42	
Mercury		0.00019	mg/L	0.00010	97	90	110			
Lab ID: CCV1		Continuing Calibration Verification Standard							06/11/14 09:47	
Mercury		0.00021	mg/L	0.00010	104	95	105			
Lab ID: CCV		Continuing Calibration Verification Standard							06/11/14 10:58	
Mercury		0.00021	mg/L	0.00010	104	90	110			
Method: E245.1										Batch: 24881
Lab ID: MB-24881		Method Blank				Run: HGCV202-H_140611A			06/11/14 09:55	
Mercury		2E-06	mg/L	1E-06						
Lab ID: LCS-24881		Laboratory Control Sample				Run: HGCV202-H_140611A			06/11/14 10:03	
Mercury		0.00015	mg/L	0.00010	98	90	110			
Lab ID: H14060114-005DMS		Sample Matrix Spike				Run: HGCV202-H_140611A			06/11/14 12:00	
Mercury		0.00015	mg/L	0.00010	99	70	130			
Lab ID: H14060114-005DMSD		Sample Matrix Spike Duplicate				Run: HGCV202-H_140611A			06/11/14 12:04	
Mercury		0.00015	mg/L	0.00010	99	70	130	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring

Report Date: 07/09/14
Work Order: H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV202-H_140613A	
Lab ID: **ICV**		Initial Calibration Verification Standard							06/13/14 11:10	
Mercury		0.00020	mg/L	0.00010	98	90	110			
Lab ID: **CCV1**		Continuing Calibration Verification Standard							06/13/14 11:17	
Mercury		0.00020	mg/L	0.00010	102	95	105			
Method: **E245.1**									Batch: 24896	
Lab ID: **MB-24896**		Method Blank				Run: HGCV202-H_140613A			06/13/14 12:32	
Mercury		3E-06	mg/L	1E-06						
Lab ID: **LCS-24896**		Laboratory Control Sample				Run: HGCV202-H_140613A			06/13/14 12:40	
Mercury		0.00016	mg/L	0.00010	104	90	110			
Lab ID: **H14060178-006AMS**		Sample Matrix Spike				Run: HGCV202-H_140613A			06/13/14 13:18	
Mercury		0.00016	mg/L	0.00010	103	70	130			
Lab ID: **H14060178-006AMSD**		Sample Matrix Spike Duplicate				Run: HGCV202-H_140613A			06/13/14 13:22	
Mercury		0.00015	mg/L	0.00010	100	70	130	2.6	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14

Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC102-H_140609A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							06/09/14 11:48	
Chloride			100	mg/L	1.0	104	90	110			
Sulfate			420	mg/L	1.0	105	90	110			
Lab ID:	**CCV060914-1**	2	Continuing Calibration Verification Standard							06/09/14 12:33	
Chloride			110	mg/L	1.0	108	90	110			
Sulfate			420	mg/L	1.0	105	90	110			
Lab ID:	**CCV060914-2**	2	Continuing Calibration Verification Standard							06/09/14 14:57	
Chloride			110	mg/L	1.0	107	90	110			
Sulfate			420	mg/L	1.0	105	90	110			
Method:	**E300.0**										Batch: R97855
Lab ID:	**ICB**	2	Method Blank				Run: IC102-H_140609A			06/09/14 11:59	
Chloride			0.02	mg/L	0.008						
Sulfate			ND	mg/L	0.08						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC102-H_140609A			06/09/14 12:10	
Chloride			47	mg/L	1.0	94	90	110			
Sulfate			200	mg/L	1.0	99	90	110			
Lab ID:	**H14060120-013AMS**	2	Sample Matrix Spike				Run: IC102-H_140609A			06/09/14 13:06	
Chloride			230	mg/L	1.0	89	90	110			S
Sulfate			450	mg/L	1.0	104	90	110			
Lab ID:	**H14060159-012AMS**	2	Sample Matrix Spike				Run: IC102-H_140609A			06/09/14 15:30	
Chloride			68	mg/L	1.0	99	90	110			
Sulfate			370	mg/L	1.0	105	90	110			
Lab ID:	**H14060159-012AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140609A			06/09/14 15:42	
Chloride			69	mg/L	1.0	101	90	110	1.5	20	
Sulfate			380	mg/L	1.0	107	90	110	1.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 07/09/14
Project: Silver Bow Creek Monitoring **Work Order:** H14060159

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC102-H_140611A	
Lab ID:	**ICV**		Initial Calibration Verification Standard							06/11/14 09:36	
Sulfate			410	mg/L	1.0	103	90	110			
Lab ID:	**CCV061114-1**		Continuing Calibration Verification Standard							06/11/14 10:20	
Sulfate			410	mg/L	1.0	104	90	110			
Method:	**E300.0**									Batch: R97924	
Lab ID:	**ICB**		Method Blank				Run: IC102-H_140611A			06/11/14 09:47	
Sulfate			ND	mg/L	0.08						
Lab ID:	**LFB**		Laboratory Fortified Blank				Run: IC102-H_140611A			06/11/14 09:58	
Sulfate			190	mg/L	1.0	96	90	110			
Lab ID:	**H14060168-001AMS**		Sample Matrix Spike				Run: IC102-H_140611A			06/11/14 13:29	
Sulfate			210	mg/L	1.0	102	90	110			
Lab ID:	**H14060168-001AMSD**		Sample Matrix Spike Duplicate				Run: IC102-H_140611A			06/11/14 13:40	
Sulfate			210	mg/L	1.0	103	90	110	0.6	20	
Method:	**E300.0**									Analytical Run: IC102-H_140612A	
Lab ID:	**ICV**		Initial Calibration Verification Standard							06/12/14 15:13	
Sulfate			420	mg/L	1.0	105	90	110			
Lab ID:	**CCV061214-2**		Continuing Calibration Verification Standard							06/12/14 18:33	
Sulfate			420	mg/L	1.0	106	90	110			
Method:	**E300.0**									Batch: R97977	
Lab ID:	**ICB**		Method Blank				Run: IC102-H_140612A			06/12/14 15:24	
Sulfate			0.2	mg/L	0.08						
Lab ID:	**LFB**		Laboratory Fortified Blank				Run: IC102-H_140612A			06/12/14 15:35	
Sulfate			200	mg/L	1.0	98	90	110			
Lab ID:	**H14060235-003AMS**		Sample Matrix Spike				Run: IC102-H_140612A			06/12/14 19:06	
Sulfate			660	mg/L	1.0	108	90	110			
Lab ID:	**H14060235-003AMSD**		Sample Matrix Spike Duplicate				Run: IC102-H_140612A			06/12/14 19:17	
Sulfate			670	mg/L	1.0	111	90	110	0.9	20	S

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring

Report Date: 07/09/14
Work Order: H14060159

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **SW7470A**									Analytical Run: HGCV202-H_140611A	
Lab ID: **ICV**		Initial Calibration Verification Standard							06/11/14 15:42	
Mercury		0.00019	mg/L	0.00010	96	90	110			
Method: **SW7470A**									Batch: 24881	
Lab ID: **MB-24835**		Method Blank				Run: HGCV202-H_140611A			06/11/14 09:59	
Mercury		3E-06	mg/L	1E-06						
Lab ID: **LCS-24881**		Laboratory Control Sample				Run: HGCV202-H_140611A			06/11/14 10:03	
Mercury		0.00015	mg/L	0.00010	97	90	110			
Lab ID: **H14060114-005DMS**		Sample Matrix Spike				Run: HGCV202-H_140611A			06/11/14 12:00	
Mercury		0.00015	mg/L	0.00010	99	85	115			
Lab ID: **H14060114-005DMSD**		Sample Matrix Spike Duplicate				Run: HGCV202-H_140611A			06/11/14 12:04	
Mercury		0.00015	mg/L	0.00010	99	85	115	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Workorder Receipt Checklist

MT DEQ-Federal Superfund

H14060159

Login completed by: Tracy L. Lorash
Date Received: 6/5/2014
Reviewed by: BL2000\sdull
Received by: wjj
Reviewed Date: 6/12/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☐	No ☑	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	3.7°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☑	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Samples LYS-08, LYS-03, LYS-07, LYS-05 and LYS-04 do not have sufficient sample to do all analysis. Per Joe, we are to do metals on those.
Samples LYS-06 and LYS-02 are to have metals run first and then IC and alkalinity per Joe.
Samples for Dissolved Metals/Hardness were subsampled, filtered, and preserved to pH <2 with 2 mL of Nitric acid per 250 mL in the laboratory. According to 40CFR136, samples for Dissolved Metals should be filtered and preserved within 15 minutes of collection. TI 6/6/14

APPENDIX B3

ANALYTICAL LABORATORY RESULTS
3RD QUARTER MONITORING

ANALYTICAL SUMMARY REPORT

October 12, 2014

Natural Resource Damage Program
1301 E Lockey
Helena, MT 59620-1425

Work Order: H14090233 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 12 samples for Natural Resource Damage Program on 9/12/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14090233-001	SS-01	09/11/14 13:30	09/12/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14090233-002	SS-05A	09/11/14 12:15	09/12/14	Aqueous	Same As Above
H14090233-003	SS-15G	09/09/14 16:00	09/12/14	Aqueous	Same As Above
H14090233-004	SS-01 Sediment Sieve <0.065mm	09/11/14 13:30	09/12/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves Soil Preparation
H14090233-005	SS-01 Sediment Sieve 0.065-1mm	09/11/14 13:30	09/12/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14090233-006	SS-01 Sediment Sieve 1-2mm	09/11/14 13:30	09/12/14	Sediment	Same As Above
H14090233-007	SS-05A Sediment Sieve <0.065mm	09/11/14 12:15	09/12/14	Sediment	Same As Above
H14090233-008	SS-05A Sediment Sieve 0.065-1mm	09/11/14 12:15	09/12/14	Sediment	Same As Above
H14090233-009	SS-05A Sediment Sieve 1-2mm	09/11/14 12:15	09/12/14	Sediment	Same As Above
H14090233-010	SS-15G Sediment Sieve <0.065mm	09/09/14 16:00	09/12/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14090233-011	SS-15G Sediment Sieve 0.065-1mm	09/09/14 16:00	09/12/14	Sediment	Same As Above
H14090233-012	SS-15G Sediment Sieve 1-2mm	09/09/14 16:00	09/12/14	Sediment	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14090233-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	3	mg/L		1		A2540 D	09/15/14 14:39 / SR		-124 (14410200)_140915A	5	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 18:25 / SR		PHSC_101-H_140915A	99	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 18:25 / SR		PHSC_101-H_140915A	99	R100537
Chloride	12	mg/L		1		E300.0	09/15/14 17:13 / SR		IC102-H_140915A	26	R100569
Sulfate	23	mg/L		1		E300.0	09/15/14 17:13 / SR		IC102-H_140915A	26	R100569
Hardness as CaCO3	119	mg/L		1		A2340 B	09/15/14 11:59 / abb		CALC_140917A	256	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:28 / cm		FIA203-HE_140916A	20	R100588
Nitrogen, Nitrate+Nitrite as N	0.98	mg/L		0.05		E353.2	09/12/14 15:47 / cm		FIA203-HE_140912B	73	R100503
Nitrogen, Total	0.92	mg/L		0.05		A4500 N-C	09/18/14 15:25 / cm	09/18/14 09:39	FIA203-HE_140919A	33	26206
Phosphorus, Total as P	0.079	mg/L		0.005		E365.1	09/15/14 16:00 / cm	09/15/14 14:37	FIA202-HE_140915A	63	26163
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Arsenic	0.003	mg/L		0.001		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Barium	0.057	mg/L		0.003		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 11:59 / sld		ICP2-HE_140915A	29	R100549
Cadmium	ND	mg/L		0.00003		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Calcium	34	mg/L		1		E200.7	09/15/14 11:59 / sld		ICP2-HE_140915A	29	R100549
Chromium	ND	mg/L		0.01		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Copper	0.001	mg/L		0.001		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Iron	0.12	mg/L		0.02		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Lead	ND	mg/L		0.0003		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Magnesium	8	mg/L		1		E200.7	09/15/14 11:59 / sld		ICP2-HE_140915A	29	R100549
Manganese	0.041	mg/L		0.001		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:02 / sbk	09/22/14 10:46	HGCV202-H_140923A	45	26246

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14090233-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Nickel	ND	mg/L		0.002		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Potassium	3	mg/L		1		E200.7	09/15/14 11:59 / sld		ICP2-HE_140915A	29	R100549
Selenium	ND	mg/L		0.001		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Silver	ND	mg/L		0.0002		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Sodium	12	mg/L		1		E200.7	09/15/14 11:59 / sld		ICP2-HE_140915A	29	R100549
Uranium	0.0037	mg/L		0.0002		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
Zinc	0.009	mg/L		0.008		E200.8	09/17/14 23:34 / dck		ICPMS204-B_140917A	133	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.047	mg/L		0.009		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Arsenic	0.003	mg/L		0.001		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Barium	0.051	mg/L		0.003		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Boron	ND	mg/L		0.1		E200.7	09/16/14 13:15 / sld	09/15/14 10:39	ICP2-HE_140916B	35	26145
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Calcium	36	mg/L		1		E200.7	09/16/14 13:15 / sld	09/15/14 10:39	ICP2-HE_140916B	35	26145
Chromium	ND	mg/L		0.01		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Copper	0.003	mg/L		0.001		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Iron	0.35	mg/L		0.02		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Lead	0.0004	mg/L		0.0003		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Magnesium	9	mg/L		1		E200.7	09/16/14 13:15 / sld	09/15/14 10:39	ICP2-HE_140916B	35	26145
Manganese	0.046	mg/L		0.001		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:15 / sbk	09/22/14 10:46	HGCV202-H_140923A	48	26246
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Nickel	ND	mg/L		0.002		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Potassium	3	mg/L		1		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Selenium	ND	mg/L		0.001		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Silver	ND	mg/L		0.0002		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14090233-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	12	mg/L		1		E200.7	09/16/14 13:15 / sld	09/15/14 10:39	ICP2-HE_140916B	35	26145
Uranium	0.0039	mg/L		0.0002		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145
Zinc	ND	mg/L		0.008		E200.8	09/18/14 00:00 / dck	09/15/14 10:39	ICPMS204-B_140917A	139	26145

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14090233-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	7	mg/L		1		A2540 D	09/15/14 14:40 / SR		-124 (14410200)_140915A	6	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 18:45 / SR		PHSC_101-H_140915A	102	R100537
Bicarbonate as HCO3	130	mg/L		4		A2320 B	09/15/14 18:45 / SR		PHSC_101-H_140915A	102	R100537
Chloride	17	mg/L		1		E300.0	09/15/14 17:24 / SR		IC102-H_140915A	27	R100569
Sulfate	28	mg/L		1		E300.0	09/15/14 17:24 / SR		IC102-H_140915A	27	R100569
Hardness as CaCO3	129	mg/L		1		A2340 B	09/15/14 12:21 / abb		CALC_140917A	267	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:31 / cm		FIA203-HE_140916A	23	R100588
Nitrogen, Nitrate+Nitrite as N	1.02	mg/L		0.05		E353.2	09/12/14 15:48 / cm		FIA203-HE_140912B	74	R100503
Nitrogen, Total	1.86	mg/L		0.05		A4500 N-C	09/18/14 15:26 / cm	09/18/14 09:39	FIA203-HE_140919A	34	26206
Phosphorus, Total as P	0.067	mg/L		0.005		E365.1	09/15/14 16:01 / cm	09/15/14 14:37	FIA202-HE_140915A	64	26163
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Arsenic	0.004	mg/L		0.001		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Barium	0.061	mg/L		0.003		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:21 / sld		ICP2-HE_140915A	35	R100549
Cadmium	0.00003	mg/L		0.00003		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Calcium	37	mg/L		1		E200.7	09/15/14 12:21 / sld		ICP2-HE_140915A	35	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Copper	0.002	mg/L		0.001		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Iron	0.10	mg/L		0.02		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Magnesium	9	mg/L		1		E200.7	09/15/14 12:21 / sld		ICP2-HE_140915A	35	R100549
Manganese	0.082	mg/L		0.001		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:19 / sbk	09/22/14 10:46	HGCV202-H_140923A	49	26246

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14090233-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Potassium	3	mg/L		1		E200.7	09/15/14 12:21 / sld		ICP2-HE_140915A	35	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Sodium	16	mg/L		1		E200.7	09/15/14 12:21 / sld		ICP2-HE_140915A	35	R100549
Uranium	0.0039	mg/L		0.0002		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
Zinc	0.019	mg/L		0.008		E200.8	09/18/14 00:31 / dck		ICPMS204-B_140917A	146	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.094	mg/L		0.009		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Barium	0.055	mg/L		0.003		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Boron	ND	mg/L		0.1		E200.7	09/16/14 13:30 / sld	09/15/14 10:39	ICP2-HE_140916B	39	26145
Cadmium	0.00011	mg/L	D	0.00006		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Calcium	39	mg/L		1		E200.7	09/16/14 13:30 / sld	09/15/14 10:39	ICP2-HE_140916B	39	26145
Chromium	ND	mg/L		0.01		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Copper	0.007	mg/L		0.001		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Iron	0.43	mg/L		0.02		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Lead	0.0022	mg/L		0.0003		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Magnesium	9	mg/L		1		E200.7	09/16/14 13:30 / sld	09/15/14 10:39	ICP2-HE_140916B	39	26145
Manganese	0.098	mg/L		0.001		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:23 / sbk	09/22/14 10:46	HGCV202-H_140923A	50	26246
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Nickel	ND	mg/L		0.002		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Potassium	3	mg/L		1		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Selenium	ND	mg/L		0.001		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Silver	ND	mg/L		0.0002		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14090233-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	16	mg/L		1		E200.7	09/16/14 13:30 / sld	09/15/14 10:39	ICP2-HE_140916B	39	26145
Uranium	0.0042	mg/L		0.0002		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145
Zinc	0.025	mg/L		0.008		E200.8	09/18/14 00:35 / dck	09/15/14 10:39	ICPMS204-B_140917A	147	26145

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14090233-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	1	mg/L		1		A2540 D	09/12/14 14:37 / cm		I24 (14410200)_140912A	43	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	09/15/14 18:51 / SR		PHSC_101-H_140915A	104	R100537
Bicarbonate as HCO3	130	mg/L		4		A2320 B	09/15/14 18:51 / SR		PHSC_101-H_140915A	104	R100537
Chloride	ND	mg/L		1		E300.0	09/15/14 17:35 / SR		IC102-H_140915A	28	R100569
Sulfate	22	mg/L		1		E300.0	09/15/14 17:35 / SR		IC102-H_140915A	28	R100569
Hardness as CaCO3	128	mg/L		1		A2340 B	09/19/14 08:41 / sld		WATERCALC_140919A	15	R100691
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:35 / cm		FIA203-HE_140916A	26	R100588
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	09/12/14 15:50 / cm		FIA203-HE_140912B	75	R100503
Nitrogen, Total	0.51	mg/L		0.05		A4500 N-C	09/18/14 15:27 / cm	09/18/14 09:39	FIA203-HE_140919A	35	26206
Phosphorus, Total as P	0.026	mg/L		0.005		E365.1	09/15/14 16:02 / cm	09/15/14 14:37	FIA202-HE_140915A	65	26163
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Arsenic	0.004	mg/L		0.001		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Barium	0.026	mg/L		0.003		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:25 / sld		ICP2-HE_140915A	36	R100549
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Calcium	38	mg/L		1		E200.7	09/15/14 12:25 / sld		ICP2-HE_140915A	36	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Copper	ND	mg/L		0.001		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Iron	ND	mg/L		0.02		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Magnesium	7	mg/L		1		E200.7	09/15/14 12:25 / sld		ICP2-HE_140915A	36	R100549
Manganese	0.002	mg/L		0.001		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:28 / sbk	09/22/14 10:46	HGCV202-H_140923A	51	26246

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14090233-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Potassium	1	mg/L		1		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Selenium	ND	mg/L		0.001		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Sodium	4	mg/L		1		E200.7	09/15/14 12:25 / sld		ICP2-HE_140915A	36	R100549
Uranium	0.0007	mg/L		0.0002		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
Zinc	0.009	mg/L		0.008		E200.8	09/18/14 00:40 / dck		ICPMS204-B_140917A	148	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.025	mg/L		0.009		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Arsenic	0.004	mg/L		0.001		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Barium	0.022	mg/L		0.003		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Boron	ND	mg/L		0.1		E200.7	09/16/14 13:34 / sld	09/15/14 10:39	ICP2-HE_140916B	40	26145
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Calcium	39	mg/L		1		E200.7	09/16/14 13:34 / sld	09/15/14 10:39	ICP2-HE_140916B	40	26145
Chromium	ND	mg/L		0.01		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Copper	0.001	mg/L		0.001		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Iron	0.04	mg/L		0.02		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Lead	ND	mg/L		0.0003		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Magnesium	7	mg/L		1		E200.7	09/16/14 13:34 / sld	09/15/14 10:39	ICP2-HE_140916B	40	26145
Manganese	0.004	mg/L		0.001		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:32 / sbk	09/22/14 10:46	HGCV202-H_140923A	52	26246
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Nickel	ND	mg/L		0.002		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Potassium	1	mg/L		1		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Selenium	ND	mg/L		0.001		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Silver	ND	mg/L		0.0002		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14090233-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	4	mg/L		1		E200.7	09/16/14 13:34 / sld	09/15/14 10:39	ICP2-HE_140916B	40	26145
Uranium	0.0007	mg/L		0.0002		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145
Zinc	ND	mg/L		0.008		E200.8	09/18/14 00:44 / dck	09/15/14 10:39	ICPMS204-B_140917A	149	26145

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14090233-004
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.7	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	1	R101208
PHYSICAL CHARACTERISTICS											
Moisture	55.7	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002A	1	R101084
3050 EXTRACTABLE METALS											
Aluminum	9310	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Arsenic	15	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Barium	114	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Cadmium	0.8	mg/kg		0.2		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Chromium	23	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Copper	159	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Iron	13900	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Lead	53	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Manganese	307	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Molybdenum	16	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Nickel	10	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	23	26333
Vanadium	38	mg/kg		1		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
Zinc	201	mg/kg		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	84	26333
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/26/14 15:16 / rgk	09/25/14 11:33	HGCV201-H_140926A	15	26320
METAL, DRY WEIGHT											
Aluminum	21000	mg/kg-dry		8		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14090233-004
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Arsenic	34	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Barium	258	mg/kg-dry		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Cadmium	1.8	mg/kg-dry		0.3		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Chromium	51	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Copper	359	mg/kg-dry		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Iron	31400	mg/kg-dry		7		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Lead	120	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Manganese	693	mg/kg-dry		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Molybdenum	36	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Nickel	23	mg/kg-dry		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Uranium	7	mg/kg-dry		5		SW6020	09/30/14 13:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	179	26333
Vanadium	86	mg/kg-dry		2		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Zinc	453	mg/kg-dry		5		SW6010B	09/30/14 21:37 / sld	09/29/14 08:00	ICP2-HE_140930A	187	26333
Mercury	0.17	mg/kg-dry		0.10		SW7471B	09/26/14 15:16 / rgk	09/25/14 11:33	HGCV201-H_140926A	42	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14090233-005
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	49.7	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	2	R101208
PHYSICAL CHARACTERISTICS											
Moisture	22.0	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002A	2	R101084
3050 EXTRACTABLE METALS											
Aluminum	2760	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Arsenic	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Barium	32	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Cadmium	ND	mg/kg		0.2		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Chromium	8	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Copper	31	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Iron	5490	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Lead	19	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Manganese	114	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Nickel	ND	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	59	26334
Vanadium	15	mg/kg		1		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
Zinc	80	mg/kg		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	116	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/26/14 15:19 / rgk	09/25/14 11:33	HGCV201-H_140926A	16	26320
METAL, DRY WEIGHT											
Aluminum	3540	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14090233-005
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Barium	41	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Cadmium	0.2	mg/kg-dry		0.2		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Chromium	11	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Copper	40	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Iron	7040	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Lead	24	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Manganese	147	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Nickel	ND	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	198	26334
Vanadium	19	mg/kg-dry		1		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Zinc	102	mg/kg-dry		5		SW6010B	09/30/14 23:35 / sld	09/29/14 08:00	ICP2-HE_140930A	219	26334
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/26/14 15:19 / rgk	09/25/14 11:33	HGCV201-H_140926A	43	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14090233-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	25.0	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	3	R101208
PHYSICAL CHARACTERISTICS											
Moisture	22.3	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002A	4	R101084
3050 EXTRACTABLE METALS											
Aluminum	1940	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Arsenic	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Barium	42	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Cadmium	ND	mg/kg		0.2		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Copper	24	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Iron	3630	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Lead	6	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Manganese	185	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	95	26335
Vanadium	8	mg/kg		1		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
Zinc	61	mg/kg		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	153	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/26/14 15:21 / rgk	09/25/14 11:33	HGCV201-H_140926A	17	26320
METAL, DRY WEIGHT											
Aluminum	2490	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14090233-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 13:30
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Barium	54	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Cadmium	ND	mg/kg-dry		0.2		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Chromium	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Copper	31	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Iron	4670	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Lead	8	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Manganese	238	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	217	26335
Vanadium	11	mg/kg-dry		1		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Zinc	79	mg/kg-dry		5		SW6010B	10/01/14 01:52 / sld	09/29/14 08:00	ICP2-HE_140930A	256	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/26/14 15:21 / rgk	09/25/14 11:33	HGCV201-H_140926A	44	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14090233-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	5.9	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929	E : 4	R101208
PHYSICAL CHARACTERISTICS											
Moisture	61.1	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002	A : 5	R101084
3050 EXTRACTABLE METALS											
Aluminum	7950	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Arsenic	98	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Barium	119	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Cadmium	6.3	mg/kg		0.2		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Chromium	23	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Copper	1010	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Iron	15300	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Lead	241	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Manganese	543	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Molybdenum	9	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Nickel	8	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 24	26333
Vanadium	39	mg/kg		1		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
Zinc	1360	mg/kg		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 85	26333
METALS, TOTAL											
Mercury	0.54	mg/kg		0.10		SW7471B	09/26/14 15:36 / rgk	09/25/14 11:33	HGCV201-H_140926	A : 21	26320
METAL, DRY WEIGHT											
Aluminum	20400	mg/kg-dry		9		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930	A : 188	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14090233-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Arsenic	253	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Barium	306	mg/kg-dry		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Cadmium	16.1	mg/kg-dry		0.4		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Chromium	58	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Copper	2600	mg/kg-dry		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Iron	39200	mg/kg-dry		8		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Lead	620	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Manganese	1400	mg/kg-dry		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Molybdenum	23	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Nickel	22	mg/kg-dry		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Silver	8	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Uranium	13	mg/kg-dry		5		SW6020	09/30/14 13:46 / dck	09/29/14 08:00	ICPMS204-B_140930A	180	26333
Vanadium	101	mg/kg-dry		2		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Zinc	3500	mg/kg-dry		5		SW6010B	09/30/14 21:40 / sld	09/29/14 08:00	ICP2-HE_140930A	188	26333
Mercury	1.4	mg/kg-dry		0.13		SW7471B	09/26/14 15:36 / rgk	09/25/14 11:33	HGCV201-H_140926A	48	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14090233-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	40.5	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	5	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.2	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002A	6	R101084
3050 EXTRACTABLE METALS											
Aluminum	4090	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Arsenic	68	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Barium	55	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Cadmium	4.6	mg/kg		0.2		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Chromium	17	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Cobalt	7	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Copper	641	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Iron	44000	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Lead	196	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Manganese	810	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Nickel	8	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	60	26334
Vanadium	59	mg/kg		1		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
Zinc	1520	mg/kg		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	117	26334
METALS, TOTAL											
Mercury	0.15	mg/kg		0.10		SW7471B	09/26/14 15:38 / rgk	09/25/14 11:33	HGCV201-H_140926A	22	26320
METAL, DRY WEIGHT											
Aluminum	5180	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14090233-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Arsenic	87	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Barium	70	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Cadmium	5.8	mg/kg-dry		0.2		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Chromium	22	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Cobalt	8	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Copper	814	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Iron	55800	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Lead	249	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Manganese	1030	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Nickel	10	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Uranium	6	mg/kg-dry		5		SW6020	09/30/14 16:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	199	26334
Vanadium	75	mg/kg-dry		1		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Zinc	1930	mg/kg-dry		5		SW6010B	09/30/14 23:39 / sld	09/29/14 08:00	ICP2-HE_140930A	220	26334
Mercury	0.20	mg/kg-dry		0.10		SW7471B	09/26/14 15:38 / rgk	09/25/14 11:33	HGCV201-H_140926A	49	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14090233-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	12.5	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	6	R101208
PHYSICAL CHARACTERISTICS											
Moisture	18.3	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002A	7	R101084
3050 EXTRACTABLE METALS											
Aluminum	2980	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Arsenic	48	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Barium	43	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Cadmium	1.4	mg/kg		0.2		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Chromium	5	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Copper	296	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Iron	10700	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Lead	70	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Manganese	364	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	96	26335
Vanadium	14	mg/kg		1		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
Zinc	998	mg/kg		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	154	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/26/14 15:41 / rgk	09/25/14 11:33	HGCV201-H_140926A	23	26320
METAL, DRY WEIGHT											
Aluminum	3650	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14090233-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 12:15
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Arsenic	59	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Barium	53	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Cadmium	1.7	mg/kg-dry		0.2		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Chromium	7	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Copper	362	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Iron	13100	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Lead	85	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Manganese	446	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:07 / dck	09/29/14 08:00	ICPMS204-B_140930A	218	26335
Vanadium	17	mg/kg-dry		1		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Zinc	1220	mg/kg-dry		5		SW6010B	10/01/14 01:56 / sld	09/29/14 08:00	ICP2-HE_140930A	257	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/26/14 15:41 / rgk	09/25/14 11:33	HGCV201-H_140926A	50	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve <0.065mm
Lab ID: H14090233-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.6	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	7	R101208
PHYSICAL CHARACTERISTICS											
Moisture	55.6	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002A	8	R101084
3050 EXTRACTABLE METALS											
Aluminum	11300	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Arsenic	25	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Barium	110	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Cadmium	0.7	mg/kg		0.2		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Chromium	26	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Copper	57	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Iron	11600	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Lead	39	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Manganese	269	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Nickel	14	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	25	26333
Vanadium	29	mg/kg		1		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
Zinc	67	mg/kg		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	86	26333
METALS, TOTAL											
Mercury	0.33	mg/kg		0.10		SW7471B	09/26/14 15:43 / rgk	09/25/14 11:33	HGCV201-H_140926A	24	26320
METAL, DRY WEIGHT											
Aluminum	25500	mg/kg-dry		7		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve <0.065mm
Lab ID: H14090233-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00 **DateReceived:** 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Arsenic	56	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Barium	247	mg/kg-dry		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Boron	ND	mg/kg-dry		9		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Cadmium	1.6	mg/kg-dry		0.3		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Chromium	59	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Copper	129	mg/kg-dry		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Iron	26100	mg/kg-dry		6		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Lead	89	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Manganese	606	mg/kg-dry		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Nickel	32	mg/kg-dry		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 13:50 / dck	09/29/14 08:00	ICPMS204-B_140930A	181	26333
Vanadium	64	mg/kg-dry		2		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Zinc	150	mg/kg-dry		5		SW6010B	09/30/14 21:44 / sld	09/29/14 08:00	ICP2-HE_140930A	189	26333
Mercury	0.75	mg/kg-dry		0.10		SW7471B	09/26/14 15:43 / rgk	09/25/14 11:33	HGCV201-H_140926A	51	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 0.065-1mm
Lab ID: H14090233-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	38.0	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929	E : 8	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.9	wt%		0.2		D2974	10/03/14 08:37 / sld		DRYING OVEN 2_141002	A : 9	R101084
3050 EXTRACTABLE METALS											
Aluminum	6770	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Arsenic	28	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Barium	96	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Cadmium	ND	mg/kg		0.2		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Chromium	16	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Copper	20	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Iron	17200	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Lead	7	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Manganese	131	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Nickel	6	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930	A : 61	26334
Vanadium	54	mg/kg		1		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
Zinc	32	mg/kg		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 118	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/26/14 15:46 / rgk	09/25/14 11:33	HGCV201-H_140926	A : 25	26320
METAL, DRY WEIGHT											
Aluminum	8670	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930	A : 221	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 0.065-1mm
Lab ID: H14090233-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Arsenic	36	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Barium	123	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Cadmium	ND	mg/kg-dry		0.2		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Chromium	21	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Copper	26	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Iron	22100	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Lead	8	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Manganese	168	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Nickel	8	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	200	26334
Vanadium	69	mg/kg-dry		1		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Zinc	41	mg/kg-dry		5		SW6010B	09/30/14 23:42 / sld	09/29/14 08:00	ICP2-HE_140930A	221	26334
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/26/14 15:46 / rgk	09/25/14 11:33	HGCV201-H_140926A	52	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 1-2mm
Lab ID: H14090233-012
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	16.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	9	R101208
PHYSICAL CHARACTERISTICS											
Moisture	19.7	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	10	R101084
3050 EXTRACTABLE METALS											
Aluminum	7960	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Arsenic	15	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Barium	107	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Cadmium	ND	mg/kg		0.2		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Chromium	12	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Copper	14	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Iron	9720	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Lead	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Manganese	155	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Nickel	6	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	97	26335
Vanadium	19	mg/kg		1		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
Zinc	47	mg/kg		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	155	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	10/02/14 15:35 / rgk	10/01/14 10:31	HGCV201-H_141002B	10	26387
METAL, DRY WEIGHT											
Aluminum	9910	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G Sediment Sieve 1-2mm
Lab ID: H14090233-012
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:00
DateReceived: 09/12/14
Report Date: 10/12/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Arsenic	18	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Barium	134	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Cadmium	ND	mg/kg-dry		0.2		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Chromium	14	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Copper	17	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Iron	12100	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Lead	5	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Manganese	193	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Nickel	8	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:12 / dck	09/29/14 08:00	ICPMS204-B_140930A	219	26335
Vanadium	24	mg/kg-dry		1		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Zinc	58	mg/kg-dry		5		SW6010B	10/01/14 02:00 / sld	09/29/14 08:00	ICP2-HE_140930A	258	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	10/02/14 15:35 / rgk	09/25/14 11:33	HGCV201-H_141002B	46	26320

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140923wa

Date: *12-Oct-14*

Run ID :Run Order: **HGCV202-H_140923A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **09/23/14 12:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	90	110				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **HGCV202-H_140923A: 33** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **09/23/14 15:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		107	90	110				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **HGCV202-H_140923A: 37** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **09/23/14 16:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		99	90	110				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **HGCV202-H_140923A: 38** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **09/23/14 16:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		99	95	105				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140926sa

Date: *12-Oct-14*

Run ID :Run Order: **HGCV201-H_140926A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **09/26/14 14:22** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00097	0.50	0.001		97	90	110				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **HGCV201-H_140926A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/26/14 14:25** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025		97	90	110				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **HGCV201-H_140926A: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/26/14 15:48** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		101	90	110				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141002sa

Date: *12-Oct-14*

Run ID :Run Order: **HGCV201-H_141002B: 3** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **10/02/14 14:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00097	0.00010	0.001		97	90	110				

Associated samples: **H14090233-012A, H14090233-012B**

Run ID :Run Order: **HGCV201-H_141002B: 4** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/02/14 14:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.00010	0.0025		100	90	110				

Associated samples: **H14090233-012A, H14090233-012B**

Run ID :Run Order: **HGCV201-H_141002B: 71** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/02/14 16:58** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		99	90	110				

Associated samples: **H14090233-012A, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26145

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 20** SampType: **Method Blank** Lab ID: **MB-26145** Method: **E200.7**
Analysis Date: **09/16/14 12:20** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.04	0.03									
Magnesium	0.01	0.01									
Sodium	ND	0.02									

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-26145** Method: **E200.7**
Analysis Date: **09/16/14 12:23** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.481	0.050	0.5		96	85	115				
Calcium	23.7	1.0	25	0.04218	95	85	115				
Magnesium	24.0	1.0	25	0.01475	96	85	115				
Sodium	25.3	1.0	25		101	85	115				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 23** SampType: **Serial Dilution** Lab ID: **H14080255-002ADIL** Method: **E200.7**
Analysis Date: **09/16/14 12:31** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.27				0	0			10	
Calcium	262	3.7				0	0	261.2	0.4	10	
Magnesium	146	3.6				0	0	140.2	4.2	10	
Sodium	16.4	2.3				0	0	17.59		10	N

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 33** SampType: **Sample Matrix Spike** Lab ID: **H14080255-002AMS3** Method: **E200.7**
Analysis Date: **09/16/14 13:08** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	12.1	0.055	12.5		97	70	130				
Calcium	891	1.0	625	261.2	101	70	130				
Magnesium	763	1.0	625	140.2	100	70	130				
Sodium	662	1.0	625	17.59	103	70	130				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26145

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14080255-002AMSD3** Method: **E200.7**
Analysis Date: **09/16/14 13:12** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	12.1	0.055	12.5		96	70	130	12.12	0.5	20	
Calcium	890	1.0	625	261.2	101	70	130	891.1	0.2	20	
Magnesium	764	1.0	625	140.2	100	70	130	763.3	0.0	20	
Sodium	665	1.0	625	17.59	104	70	130	661.9	0.5	20	

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 36** SampType: **Serial Dilution** Lab ID: **H14090233-001CDIL** Method: **E200.7**
Analysis Date: **09/16/14 13:19** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.0217	0.050				0	0	0.02062		10	N
Calcium	34.4	1.0				0	0	35.56	3.2	10	
Magnesium	8.33	1.0				0	0	8.644	3.7	10	
Sodium	11.6	1.0				0	0	11.96	3.2	10	

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 37** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001CMS3** Method: **E200.7**
Analysis Date: **09/16/14 13:23** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.510	0.050	0.5	0.02062	98	70	130				
Calcium	60.5	1.0	25	35.56	100	70	130				
Magnesium	33.6	1.0	25	8.644	100	70	130				
Sodium	38.5	1.0	25	11.96	106	70	130				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 38** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001CMSD3** Method: **E200.7**
Analysis Date: **09/16/14 13:27** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.507	0.050	0.5	0.02062	97	70	130	0.5097	0.5	20	
Calcium	60.3	1.0	25	35.56	99	70	130	60.51	0.4	20	
Magnesium	33.4	1.0	25	8.644	99	70	130	33.59	0.6	20	
Sodium	38.1	1.0	25	11.96	104	70	130	38.49	1.1	20	

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26145

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 135** SampType: **Method Blank** Lab ID: **MB-26145** Method: **E200.8**

Analysis Date: **09/17/14 23:43** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.001	0.0006									
Antimony	0.0001	3E-05									
Arsenic	0.0001	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Boron	0.002	0.001									
Cadmium	5E-05	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.002	0.002									
Lead	3E-05	3E-05									
Magnesium	0.004	0.002									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									
Selenium	ND	0.0002									
Silver	0.0002	7E-05									
Sodium	0.04	0.03									
Uranium	ND	3E-05									
Vanadium	0.0006	7E-05									
Zinc	0.001	0.001									

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICPMS204-B_140917A: 136** SampType: **Laboratory Control Sample** Lab ID: **LCS-26145** Method: **E200.8**

Analysis Date: **09/17/14 23:47** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.31	0.030	2.5	0.001436	**92**	85	115				
Antimony	0.510	0.0010	0.5	0.0001143	**102**	85	115				
Arsenic	0.521	0.0010	0.5	0.0001465	**104**	85	115				
Barium	0.503	0.050	0.5		**101**	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26145

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 136** SampType: **Laboratory Control Sample** Lab ID: **LCS-26145** Method: **E200.8**

Analysis Date: **09/17/14 23:47** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.247	0.0010	0.25		99	85	115				
Boron	0.489	0.050	0.5	0.002102	97	85	115				
Cadmium	0.260	0.0010	0.25	0.0000531	104	85	115				
Calcium	25.8	1.0	25		103	85	115				
Chromium	0.509	0.0050	0.5		102	85	115				
Cobalt	0.472	0.0050	0.5		94	85	115				
Copper	0.518	0.0050	0.5		104	85	115				
Iron	2.50	0.020	2.5	0.002226	100	85	115				
Lead	0.498	0.0010	0.5	0.0000314	100	85	115				
Magnesium	24.7	1.0	25	0.004426	99	85	115				
Manganese	2.33	0.0010	2.5		93	85	115				
Molybdenum	0.528	0.0010	0.5		106	85	115				
Nickel	0.504	0.0050	0.5		101	85	115				
Potassium	25.4	1.0	25		102	85	115				
Selenium	0.533	0.0010	0.5		107	85	115				
Silver	0.0480	0.0010	0.05	0.0001928	96	85	115				
Sodium	24.6	1.0	25	0.04471	98	85	115				
Uranium	0.497	0.00030	0.5		99	85	115				
Vanadium	0.510	0.010	0.5	0.0006441	102	85	115				
Zinc	0.510	0.010	0.5	0.001483	102	85	115				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICPMS204-B_140917A: 140** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001CMS3** Method: **E200.8**

Analysis Date: **09/18/14 00:05** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.27	0.030	2.5	0.04693	89	70	130				
Antimony	0.514	0.0010	0.5	0.0001924	103	70	130				
Arsenic	0.522	0.0010	0.5	0.003192	104	70	130				
Barium	0.549	0.050	0.5	0.05119	100	70	130				
Beryllium	0.239	0.0010	0.25		96	70	130				
Boron	0.497	0.050	0.5	0.02373	95	70	130				
Cadmium	0.253	0.0010	0.25	0.0000291	101	70	130				
Calcium	59.8	1.0	25	34.26	102	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26145

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 140** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001CMS3** Method: **E200.8**

Analysis Date: **09/18/14 00:05** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.506	0.0050	0.5	0.000309	101	70	130				
Cobalt	0.463	0.0050	0.5	0.0001058	93	70	130				
Copper	0.508	0.0050	0.5	0.002616	101	70	130				
Iron	2.79	0.020	2.5	0.354	97	70	130				
Lead	0.499	0.0010	0.5	0.0003507	100	70	130				
Magnesium	32.9	1.0	25	8.426	98	70	130				
Manganese	2.32	0.0010	2.5	0.04587	91	70	130				
Molybdenum	0.538	0.0010	0.5	0.004857	107	70	130				
Nickel	0.500	0.0050	0.5		100	70	130				
Potassium	27.4	1.0	25	2.697	99	70	130				
Selenium	0.521	0.0010	0.5	0.0003226	104	70	130				
Silver	0.0479	0.0010	0.05	0.0001013	96	70	130				
Sodium	36.2	1.0	25	11.31	100	70	130				
Uranium	0.509	0.00030	0.5	0.003878	101	70	130				
Vanadium	0.516	0.010	0.5	0.00339	103	70	130				
Zinc	0.498	0.010	0.5	0.003876	99	70	130				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICPMS204-B_140917A: 141** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001CMSD3** Method: **E200.8**

Analysis Date: **09/18/14 00:09** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.29	0.030	2.5	0.04693	90	70	130	2.274	0.6	20	
Antimony	0.529	0.0010	0.5	0.0001924	106	70	130	0.5143	2.8	20	
Arsenic	0.520	0.0010	0.5	0.003192	103	70	130	0.5218	0.3	20	
Barium	0.564	0.050	0.5	0.05119	102	70	130	0.5494	2.5	20	
Beryllium	0.241	0.0010	0.25		96	70	130	0.239	0.8	20	
Boron	0.502	0.050	0.5	0.02373	96	70	130	0.497	1.1	20	
Cadmium	0.256	0.0010	0.25	0.0000291	102	70	130	0.253	1.2	20	
Calcium	59.7	1.0	25	34.26	102	70	130	59.85	0.2	20	
Chromium	0.508	0.0050	0.5	0.000309	101	70	130	0.5055	0.4	20	
Cobalt	0.468	0.0050	0.5	0.0001058	94	70	130	0.4629	1.1	20	
Copper	0.510	0.0050	0.5	0.002616	101	70	130	0.5078	0.4	20	
Iron	2.82	0.020	2.5	0.354	99	70	130	2.786	1.2	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26145

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 141** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001CMSD3** Method: **E200.8**

Analysis Date: **09/18/14 00:09** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.502	0.0010	0.5	0.0003507	**100**	70	130	0.499	**0.5**	20	
Magnesium	32.4	1.0	25	8.426	**96**	70	130	32.89	**1.5**	20	
Manganese	2.34	0.0010	2.5	0.04587	**92**	70	130	2.324	**0.6**	20	
Molybdenum	0.550	0.0010	0.5	0.004857	**109**	70	130	0.5376	**2.3**	20	
Nickel	0.496	0.0050	0.5		**99**	70	130	0.4997	**0.7**	20	
Potassium	27.2	1.0	25	2.697	**98**	70	130	27.4	**0.9**	20	
Selenium	0.524	0.0010	0.5	0.0003226	**105**	70	130	0.5211	**0.5**	20	
Silver	0.0480	0.0010	0.05	0.0001013	**96**	70	130	0.04786	**0.3**	20	
Sodium	35.6	1.0	25	11.31	**97**	70	130	36.23	**1.8**	20	
Uranium	0.508	0.00030	0.5	0.003878	**101**	70	130	0.5091	**0.2**	20	
Vanadium	0.508	0.010	0.5	0.00339	**101**	70	130	0.5159	**1.6**	20	
Zinc	0.496	0.010	0.5	0.003876	**98**	70	130	0.4985	**0.4**	20	

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26163

Date: *12-Oct-14*

Run ID :Run Order: **FIA202-HE_140915A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-26163** Method: **E365.1**
Analysis Date: **09/15/14 15:37** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.420	0.010	0.4		105	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA202-HE_140915A: 42** SampType: **Method Blank** Lab ID: **MB-26163** Method: **E365.1**
Analysis Date: **09/15/14 15:38** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA202-HE_140915A: 58** SampType: **Sample Matrix Spike** Lab ID: **H14090214-021CMS** Method: **E365.1**
Analysis Date: **09/15/14 15:55** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.222	0.010	0.2	0.00583	108	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA202-HE_140915A: 59** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090214-021CMSD** Method: **E365.1**
Analysis Date: **09/15/14 15:56** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.224	0.010	0.2	0.00583	109	90	110	0.2221	0.6	20	

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26206

Date: *12-Oct-14*

Run ID :Run Order: **FIA203-HE_140919A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-26206** Method: **A4500 N-C**
Analysis Date: **09/18/14 14:59** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	16.1	0.30	15.2		106	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **FIA203-HE_140919A: 12** SampType: **Method Blank** Lab ID: **MB-26206** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:00** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **FIA203-HE_140919A: 31** SampType: **Sample Matrix Spike** Lab ID: **H14090214-024BMS** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:23** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.40	0.10	1	0.5402	86	90	110				S

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **FIA203-HE_140919A: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090214-024BMSD** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:24** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.37	0.10	1	0.5402	83	90	110	1.404	2.6	20	S

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26246

Date: *12-Oct-14*

Run ID :Run Order: **HGCV202-H_140923A: 40** SampType: **Method Blank** Lab ID: **MB-26246** Method: **E245.1**
Analysis Date: **09/23/14 16:41** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **HGCV202-H_140923A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-26246** Method: **E245.1**
Analysis Date: **09/23/14 16:45** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		107	90	110				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **HGCV202-H_140923A: 46** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001BMS** Method: **E245.1**
Analysis Date: **09/23/14 17:06** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		96	70	130				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **HGCV202-H_140923A: 47** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001BMSD** Method: **E245.1**
Analysis Date: **09/23/14 17:11** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		95	70	130	0.0001443	1.7	20	

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26320

Date: *12-Oct-14*

Run ID :Run Order: **HGCV201-H_140926A: 4** SampType: **Method Blank** Lab ID: **MB-26320** Method: **SW7471B**
Analysis Date: **09/26/14 14:29** Units: **mg/kg** **Prep Info:** Prep Date: **9/25/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005	0.0003									

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012B**

Run ID :Run Order: **HGCV201-H_140926A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-26320** Method: **SW7471B**
Analysis Date: **09/26/14 14:32** Units: **mg/kg** **Prep Info:** Prep Date: **9/25/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.7	0.50	4.995	0.004873	94	80	120				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012B**

Run ID :Run Order: **HGCV201-H_140926A: 6** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26320** Method: **SW7471B**
Analysis Date: **09/26/14 14:34** Units: **mg/kg** **Prep Info:** Prep Date: **9/25/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1		108	80	120				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012B**

Run ID :Run Order: **HGCV201-H_140926A: 12** SampType: **Sample Matrix Spike** Lab ID: **H14090461-002AMS** Method: **SW7471B**
Analysis Date: **09/26/14 15:01** Units: **mg/kg-dry** **Prep Info:** Prep Date: **9/25/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.6	0.50	1.061	0.1732	131	80	120				S

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012B**

Run ID :Run Order: **HGCV201-H_140926A: 13** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090461-002AMSD** Method: **SW7471B**
Analysis Date: **09/26/14 15:04** Units: **mg/kg-dry** **Prep Info:** Prep Date: **9/25/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.4	0.50	1.057	0.1732	118	80	120	1.569	10	20	

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 81** SampType: **Method Blank** Lab ID: **MB-26333** Method: **SW6010B**
Analysis Date: **09/30/14 21:25** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1	0.3									
Barium	0.2	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.03	0.02									
Nickel	ND	0.07									
Vanadium	0.2	0.1									
Zinc	2	0.09									

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICP2-HE_140930A: 82** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26333** Method: **SW6010B**
Analysis Date: **09/30/14 21:29** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	252	5.0	250	1.049	100	80	120				
Barium	49.2	1.0	50	0.208	98	80	120				
Cobalt	47.6	1.0	50		95	80	120				
Copper	49.3	1.0	50		99	80	120				
Iron	264	5.0	250	14.62	100	80	120				
Manganese	247	1.0	250	0.0335	99	80	120				
Nickel	51.3	1.0	50		103	80	120				
Vanadium	50.5	1.0	50	0.187	101	80	120				
Zinc	48.7	1.0	50	2.186	93	80	120				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICP2-HE_140930A: 83** SampType: **Laboratory Control Sample** Lab ID: **LCS-26333** Method: **SW6010B**
Analysis Date: **09/30/14 21:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12600	5.0	14700	1.049	86	50.7	131.3				
Barium	529	1.0	614	0.208	86	80.6	112.2				
Cobalt	45.2	1.0	57.4		79	73.3	103.7				
Copper	247	1.1	280		88	77.5	109.6				
Iron	19300	5.0	23000	14.62	84	39.6	138.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 83** SampType: **Laboratory Control Sample** Lab ID: **LCS-26333** Method: **SW6010B**
Analysis Date: **09/30/14 21:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	355	1.0	369	0.0335	96	80.8	115.7				
Nickel	55.1	1.0	61		90	72.3	103.4				
Vanadium	63.8	1.0	73	0.187	87	66.6	107.3				
Zinc	186	1.0	213	2.186	86	74.2	109.9				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICP2-HE_140930A: 107** SampType: **Serial Dilution** Lab ID: **H14090234-064ADIL** Method: **SW6010B**
Analysis Date: **09/30/14 23:02** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10900	18				0	0	10530	3.1	10	
Barium	136	1.0				0	0	131.4	3.4	10	
Cobalt	ND	3.1				0	0	3.422		10	
Copper	325	6.0				0	0	316.8	2.6	10	
Iron	17300	16				0	0	16680	3.8	10	
Manganese	1150	1.0				0	0	1112	3.0	10	
Nickel	9.91	1.9				0	0	11.18		10	N
Vanadium	44.6	4.0				0	0	42.84	4.0	10	
Zinc	997	2.5				0	0	953.6	4.5	10	

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICP2-HE_140930A: 108** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-064APDS** Method: **SW6010B**
Analysis Date: **09/30/14 23:05** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11800	5.0	1400	10530		75	125				A
Barium	385	1.0	279.9	131.4	91	75	125				
Cobalt	243	1.0	279.9	3.422	86	75	125				
Copper	569	1.2	279.9	316.8	90	75	125				
Iron	17600	5.0	1400	16680		75	125				A
Manganese	2340	1.0	1400	1112	87	75	125				
Nickel	265	1.0	279.9	11.18	91	75	125				
Vanadium	295	1.0	279.9	42.84	90	75	125				
Zinc	1170	1.0	279.9	953.6	77	75	125				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 109** SampType: **Sample Matrix Spike** Lab ID: **H14090234-064AMS** Method: **SW6010B**

Analysis Date: **09/30/14 23:09** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12300	5.0	271.7	10530		75	125				A
Barium	182	1.0	54.35	131.4	94	75	125				
Cobalt	52.7	1.0	54.35	3.422	91	75	125				
Copper	354	1.2	54.35	316.8		75	125				A
Iron	16200	5.0	271.7	16680		75	125				A
Manganese	1300	1.0	271.7	1112		75	125				A
Nickel	62.9	1.0	54.35	11.18	95	75	125				
Vanadium	94.4	1.0	54.35	42.84	95	75	125				
Zinc	945	1.0	54.35	953.6		75	125				A

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICP2-HE_140930A: 110** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-064AMSD** Method: **SW6010B**

Analysis Date: **09/30/14 23:13** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13000	5.0	274.7	10530		75	125	12320	5.4	20	A
Barium	191	1.0	54.95	131.4	109	75	125	182.2	4.9	20	
Cobalt	53.2	1.0	54.95	3.422	91	75	125	52.68	1.0	20	
Copper	383	1.2	54.95	316.8		75	125	354.5	7.7	20	A
Iron	17100	5.0	274.7	16680		75	125	16150	6.0	20	A
Manganese	1430	1.0	274.7	1112		75	125	1304	8.9	20	A
Nickel	64.5	1.0	54.95	11.18	97	75	125	62.92	2.4	20	
Vanadium	97.9	1.0	54.95	42.84	100	75	125	94.38	3.7	20	
Zinc	1000	1.0	54.95	953.6		75	125	945.3	5.7	20	A

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 19** SampType: **Method Blank** Lab ID: **MB-26333** Method: **SW6020**
Analysis Date: **09/30/14 13:24** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICPMS204-B_140930A: 20** SampType: **Laboratory Control Sample** Lab ID: **LCS-26333** Method: **SW6020**
Analysis Date: **09/30/14 13:29** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.7	1.0	126		**37**	2.2	92.9				
Arsenic	305	1.0	343		**89**	72.3	106.4				
Beryllium	45.2	1.0	51		**89**	76.3	108.6				
Boron	75.4	4.7	93.2		**81**	59.4	101.9				
Cadmium	119	1.0	137		**87**	73	105.1				
Chromium	73.4	1.0	76		**97**	72.8	109.1				
Lead	176	1.0	187		**94**	75.9	108.6				
Molybdenum	146	1.0	172		**85**	68.6	105.8				
Selenium	197	1.0	196		**100**	72.5	112.2				
Silver	60.7	1.0	69		**88**	67.8	112.8				
Uranium	107	1.0	100		**107**	80	120				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICPMS204-B_140930A: 21** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26333** Method: **SW6020**
Analysis Date: **09/30/14 13:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.8	1.0	50		**98**	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 21** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26333** Method: **SW6020**
Analysis Date: **09/30/14 13:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.8	1.0	50		104	80	120				
Beryllium	24.8	1.0	25		99	80	120				
Boron	49.0	4.5	50		98	80	120				
Cadmium	25.6	1.0	25		102	80	120				
Chromium	52.4	1.0	50		105	80	120				
Lead	49.3	1.0	50		99	80	120				
Molybdenum	48.8	1.0	50		98	80	120				
Selenium	55.5	1.0	50		111	80	120				
Silver	24.0	1.0	25		96	80	120				
Uranium	48.4	1.0	50		97	80	120				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICPMS204-B_140930A: 48** SampType: **Serial Dilution** Lab ID: **H14090234-064ADIL** Method: **SW6020**
Analysis Date: **09/30/14 15:36** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.3565		10	
Arsenic	37.2	1.7				0	0	37.28	0.1	10	
Beryllium	ND	1.0				0	0	0.5598		10	
Boron	ND	24				0	0			10	
Cadmium	5.98	1.0				0	0	5.663		10	N
Chromium	21.7	1.1				0	0	21.69	0.2	10	
Lead	138	1.3				0	0	131.1	4.8	10	
Molybdenum	1.77	1.0				0	0	1.878		10	N
Selenium	ND	1.9				0	0	0.5908		10	
Silver	ND	1.5				0	0	1.207		10	
Uranium	3.13	1.0				0	0	2.992		10	N

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICPMS204-B_140930A: 49** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-064APDS** Method: **SW6020**
Analysis Date: **09/30/14 15:42** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2480	1.0	2718	0.3565	91	75	125				
Arsenic	2640	1.0	2718	37.28	96	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 49** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-064APDS** Method: **SW6020**

Analysis Date: **09/30/14 15:42** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	1210	1.0	1359	0.5598	89	75	125				
Boron	2450	4.9	2718		90	75	125				
Cadmium	1220	1.0	1359	5.663	89	75	125				
Chromium	2570	1.0	2718	21.69	94	75	125				
Lead	2600	1.0	2718	131.1	91	75	125				
Molybdenum	2510	1.0	2718	1.878	92	75	125				
Selenium	2740	1.0	2718	0.5908	101	75	125				
Silver	1000	1.0	1359	1.207	74	75	125				S
Uranium	2560	1.0	2718	2.992	94	75	125				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICPMS204-B_140930A: 50** SampType: **Sample Matrix Spike** Lab ID: **H14090234-064AMS** Method: **SW6020**

Analysis Date: **09/30/14 15:46** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	22.8	1.0	54.35	0.3565	41	75	125				S
Arsenic	89.7	1.0	54.35	37.28	97	75	125				
Beryllium	26.8	1.0	27.17	0.5598	96	75	125				
Boron	68.5	4.9	54.35		126	75	125				S
Cadmium	32.3	1.0	27.17	5.663	98	75	125				
Chromium	77.7	1.0	54.35	21.69	103	75	125				
Lead	180	1.0	54.35	131.1	90	75	125				
Molybdenum	53.5	1.0	54.35	1.878	95	75	125				
Selenium	60.1	1.0	54.35	0.5908	110	75	125				
Silver	31.3	1.0	27.17	1.207	111	75	125				
Uranium	55.4	1.0	54.35	2.992	96	75	125				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Run ID :Run Order: **ICPMS204-B_140930A: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-064AMSD** Method: **SW6020**

Analysis Date: **09/30/14 15:50** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.2	1.0	54.95	0.3565	38	75	125	22.77	7.2	20	S
Arsenic	95.0	1.0	54.95	37.28	105	75	125	89.73	5.7	20	
Beryllium	27.8	1.0	27.47	0.5598	99	75	125	26.77	3.8	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-064AMSD** Method: **SW6020**

Analysis Date: **09/30/14 15:50** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	63.5	4.9	54.95		115	75	125	68.53	7.7	20	
Cadmium	33.8	1.0	27.47	5.663	102	75	125	32.28	4.5	20	
Chromium	82.0	1.0	54.95	21.69	110	75	125	77.66	5.5	20	
Lead	194	1.0	54.95	131.1	115	75	125	179.9	7.7	20	
Molybdenum	56.0	1.0	54.95	1.878	98	75	125	53.51	4.5	20	
Selenium	61.3	1.0	54.95	0.5908	111	75	125	60.11	2.0	20	
Silver	30.7	1.0	27.47	1.207	107	75	125	31.33	2.0	20	
Uranium	56.9	1.0	54.95	2.992	98	75	125	55.41	2.6	20	

Associated samples: **H14090233-004A, H14090233-004B, H14090233-007A, H14090233-007B, H14090233-010A, H14090233-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 111** SampType: **Method Blank** Lab ID: **MB-26334** Method: **SW6010B**
Analysis Date: **09/30/14 23:16** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.8	0.3									
Barium	0.05	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.07	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.5	0.09									

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICP2-HE_140930A: 112** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26334** Method: **SW6010B**
Analysis Date: **09/30/14 23:20** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	243	5.0	250	0.7515	97	80	120				
Barium	48.5	1.0	50	0.05	97	80	120				
Cobalt	44.8	1.0	50		90	80	120				
Copper	48.5	1.0	50		97	80	120				
Iron	267	5.0	250	14.01	101	80	120				
Manganese	239	1.0	250	0.0695	95	80	120				
Nickel	48.0	1.0	50		96	80	120				
Vanadium	48.9	1.0	50		98	80	120				
Zinc	45.9	1.0	50	0.454	91	80	120				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICP2-HE_140930A: 113** SampType: **Laboratory Control Sample** Lab ID: **LCS-26334** Method: **SW6010B**
Analysis Date: **09/30/14 23:24** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12300	5.0	14700	0.7515	84	50.7	131.3				
Barium	518	1.0	614	0.05	84	80.6	112.2				
Cobalt	43.0	1.0	57.4		75	73.3	103.7				
Copper	233	1.1	280		83	77.5	109.6				
Iron	18500	5.0	23000	14.01	80	39.6	138.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 113** SampType: **Laboratory Control Sample** Lab ID: **LCS-26334** Method: **SW6010B**
Analysis Date: **09/30/14 23:24** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	344	1.0	369	0.0695	93	80.8	115.7				
Nickel	51.4	1.0	61		84	72.3	103.4				
Vanadium	61.0	1.0	73		84	66.6	107.3				
Zinc	171	1.0	213	0.454	80	74.2	109.9				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICP2-HE_140930A: 137** SampType: **Serial Dilution** Lab ID: **H14090234-065ADIL** Method: **SW6010B**
Analysis Date: **10/01/14 00:53** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3990	16				0	0	3833	4.0	10	
Barium	93.2	1.0				0	0	89.9	3.7	10	
Cobalt	ND	2.8				0	0			10	
Copper	71.4	5.4				0	0	65.42	8.7	10	
Iron	9490	14				0	0	9106	4.1	10	
Manganese	312	1.0				0	0	300.8	3.6	10	
Nickel	2.32	1.7				0	0	3.844		10	N
Vanadium	25.6	3.6				0	0	23.92		10	N
Zinc	293	2.3				0	0	282	3.9	10	

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICP2-HE_140930A: 147** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-065APDS** Method: **SW6010B**
Analysis Date: **10/01/14 01:30** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5110	5.0	1262	3833	101	75	125				
Barium	324	1.0	252.5	89.9	93	75	125				
Cobalt	229	1.0	252.5		91	75	125				
Copper	300	1.1	252.5	65.42	93	75	125				
Iron	10000	5.0	1262	9106		75	125				A
Manganese	1470	1.0	1262	300.8	93	75	125				
Nickel	233	1.0	252.5	3.844	91	75	125				
Vanadium	261	1.0	252.5	23.92	94	75	125				
Zinc	516	1.0	252.5	282	93	75	125				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 148** SampType: **Sample Matrix Spike** Lab ID: **H14090234-065AMS** Method: **SW6010B**

Analysis Date: **10/01/14 01:34** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5080	5.0	247.5	3833		75	125				A
Barium	133	1.0	49.5	89.9	87	75	125				
Cobalt	47.4	1.0	49.5		96	75	125				
Copper	109	1.1	49.5	65.42	88	75	125				
Iron	9190	5.0	247.5	9106		75	125				A
Manganese	535	1.0	247.5	300.8	95	75	125				
Nickel	50.2	1.0	49.5	3.844	94	75	125				
Vanadium	69.9	1.0	49.5	23.92	93	75	125				
Zinc	268	1.0	49.5	282		75	125				A

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICP2-HE_140930A: 149** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-065AMSD** Method: **SW6010B**

Analysis Date: **10/01/14 01:38** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5190	5.0	247.5	3833		75	125	5081	2.1	20	A
Barium	137	1.0	49.5	89.9	96	75	125	132.7	3.5	20	
Cobalt	46.7	1.0	49.5		94	75	125	47.39	1.5	20	
Copper	110	1.1	49.5	65.42	91	75	125	109	1.2	20	
Iron	9810	5.0	247.5	9106		75	125	9187	6.6	20	A
Manganese	591	1.0	247.5	300.8	117	75	125	535	9.9	20	
Nickel	50.3	1.0	49.5	3.844	94	75	125	50.21	0.1	20	
Vanadium	72.7	1.0	49.5	23.92	99	75	125	69.9	4.0	20	
Zinc	299	1.0	49.5	282		75	125	268.2	11	20	A

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 53** SampType: **Method Blank** Lab ID: **MB-26334** Method: **SW6020**
Analysis Date: **09/30/14 15:59** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.3	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICPMS204-B_140930A: 54** SampType: **Laboratory Control Sample** Lab ID: **LCS-26334** Method: **SW6020**
Analysis Date: **09/30/14 16:03** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.8	1.0	126	0.2912	**36**	2.2	92.9				
Arsenic	297	1.0	343		**87**	72.3	106.4				
Beryllium	45.6	1.0	51		**89**	76.3	108.6				
Boron	77.6	4.3	93.2		**83**	59.4	101.9				
Cadmium	122	1.0	137		**89**	73	105.1				
Chromium	74.0	1.0	76		**97**	72.8	109.1				
Lead	183	1.0	187		**98**	75.9	108.6				
Molybdenum	149	1.0	172		**87**	68.6	105.8				
Selenium	193	1.0	196		**98**	72.5	112.2				
Silver	61.1	1.0	69		**89**	67.8	112.8				
Uranium	111	1.0	100		**111**	80	120				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICPMS204-B_140930A: 55** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26334** Method: **SW6020**
Analysis Date: **09/30/14 16:08** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.4	1.0	50	0.2912	**96**	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 55** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26334** Method: **SW6020**
Analysis Date: **09/30/14 16:08** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.9	1.0	50		100	80	120				
Beryllium	24.7	1.0	25		99	80	120				
Boron	51.2	4.5	50		102	80	120				
Cadmium	25.1	1.0	25		100	80	120				
Chromium	50.8	1.0	50		102	80	120				
Lead	48.4	1.0	50		97	80	120				
Molybdenum	48.4	1.0	50		97	80	120				
Selenium	51.5	1.0	50		103	80	120				
Silver	23.7	1.0	25		95	80	120				
Uranium	47.4	1.0	50		95	80	120				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICPMS204-B_140930A: 84** SampType: **Serial Dilution** Lab ID: **H14090234-065ADIL** Method: **SW6020**
Analysis Date: **09/30/14 18:15** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.2025		10	
Arsenic	32.4	1.6				0	0	32.43	0.2	10	
Beryllium	ND	1.0				0	0	0.1865		10	
Boron	ND	22				0	0			10	
Cadmium	ND	1.0				0	0	0.7684		10	
Chromium	8.46	1.0				0	0	8.605		10	N
Lead	96.1	1.2				0	0	94.85	1.3	10	
Molybdenum	ND	1.0				0	0	0.4502		10	
Selenium	ND	1.8				0	0			10	
Silver	ND	1.3				0	0	0.5672		10	
Uranium	2.21	1.0				0	0	2.181		10	N

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICPMS204-B_140930A: 85** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-065APDS** Method: **SW6020**
Analysis Date: **09/30/14 18:19** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2270	1.0	2451	0.2025	92	75	125				
Arsenic	2520	1.0	2451	32.43	101	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 85** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-065APDS** Method: **SW6020**

Analysis Date: **09/30/14 18:19** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	1120	1.0	1226	0.1865	91	75	125				
Boron	2250	4.4	2451		92	75	125				
Cadmium	1110	1.0	1226	0.7684	90	75	125				
Chromium	2390	1.0	2451	8.605	97	75	125				
Lead	2350	1.0	2451	94.85	92	75	125				
Molybdenum	2270	1.0	2451	0.4502	93	75	125				
Selenium	2500	1.0	2451		102	75	125				
Silver	848	1.0	1226	0.5672	69	75	125				S
Uranium	2360	1.0	2451	2.181	96	75	125				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICPMS204-B_140930A: 86** SampType: **Sample Matrix Spike** Lab ID: **H14090234-065AMS** Method: **SW6020**

Analysis Date: **09/30/14 18:23** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	35.9	1.0	49.5	0.2025	72	75	125				S
Arsenic	70.5	1.0	49.5	32.43	77	75	125				
Beryllium	24.3	1.0	24.75	0.1865	97	75	125				
Boron	61.5	4.4	49.5		124	75	125				
Cadmium	25.8	1.0	24.75	0.7684	101	75	125				
Chromium	60.4	1.0	49.5	8.605	105	75	125				
Lead	90.3	1.0	49.5	94.85	-9	75	125				S
Molybdenum	50.3	1.0	49.5	0.4502	101	75	125				
Selenium	53.4	1.0	49.5		108	75	125				
Silver	27.5	1.0	24.75	0.5672	109	75	125				
Uranium	50.4	1.0	49.5	2.181	97	75	125				

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Run ID :Run Order: **ICPMS204-B_140930A: 87** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-065AMSD** Method: **SW6020**

Analysis Date: **09/30/14 18:28** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	33.5	1.0	49.5	0.2025	67	75	125	35.92	6.8	20	S
Arsenic	70.9	1.0	49.5	32.43	78	75	125	70.52	0.5	20	
Beryllium	25.1	1.0	24.75	0.1865	101	75	125	24.28	3.3	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 87** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-065AMSD** Method: **SW6020**

Analysis Date: **09/30/14 18:28** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	59.6	4.4	49.5		120	75	125	61.46	3.1	20	
Cadmium	26.2	1.0	24.75	0.7684	103	75	125	25.84	1.5	20	
Chromium	61.5	1.0	49.5	8.605	107	75	125	60.4	1.8	20	
Lead	78.0	1.0	49.5	94.85	-34	75	125	90.27	15	20	S
Molybdenum	49.7	1.0	49.5	0.4502	99	75	125	50.27	1.2	20	
Selenium	53.2	1.0	49.5		107	75	125	53.44	0.5	20	
Silver	27.6	1.0	24.75	0.5672	109	75	125	27.55	0.2	20	
Uranium	49.5	1.0	49.5	2.181	96	75	125	50.42	1.8	20	

Associated samples: **H14090233-005A, H14090233-005B, H14090233-008A, H14090233-008B, H14090233-011A, H14090233-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 150** SampType: **Method Blank** Lab ID: **MB-26335** Method: **SW6010B**
Analysis Date: **10/01/14 01:41** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.06	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.05	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.5	0.09									

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_140930A: 151** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26335** Method: **SW6010B**
Analysis Date: **10/01/14 01:45** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	247	5.0	250		99	80	120				
Barium	49.0	1.0	50	0.06	98	80	120				
Cobalt	45.3	1.0	50		91	80	120				
Copper	48.3	1.0	50		97	80	120				
Iron	244	5.0	250	12.4	93	80	120				
Manganese	238	1.0	250	0.0465	95	80	120				
Nickel	45.5	1.0	50		91	80	120				
Vanadium	48.5	1.0	50		97	80	120				
Zinc	46.5	1.0	50	0.483	92	80	120				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_140930A: 152** SampType: **Laboratory Control Sample** Lab ID: **LCS-26335** Method: **SW6010B**
Analysis Date: **10/01/14 01:49** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11200	5.0	14700		76	50.7	131.3				
Barium	498	1.0	614	0.06	81	80.6	112.2				
Cobalt	43.3	1.0	57.4		75	73.3	103.7				
Copper	228	1.1	280		81	77.5	109.6				
Iron	17200	5.0	23000	12.4	75	39.6	138.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 152** SampType: **Laboratory Control Sample** Lab ID: **LCS-26335** Method: **SW6010B**

Analysis Date: **10/01/14 01:49** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	336	1.0	369	0.0465	91	80.8	115.7				
Nickel	46.2	1.0	61		76	72.3	103.4				
Vanadium	55.9	1.0	73		77	66.6	107.3				
Zinc	165	1.0	213	0.483	77	74.2	109.9				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_141002A: 25** SampType: **Serial Dilution** Lab ID: **H14090234-066ADIL** Method: **SW6010B**

Analysis Date: **10/02/14 10:22** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4090	17				0	0	4016	1.8	10	
Barium	97.5	1.0				0	0	95.29	2.3	10	
Cobalt	ND	2.9				0	0			10	
Copper	51.8	5.6				0	0	49.37		10	N
Iron	7290	15				0	0	6974	4.4	10	
Manganese	381	1.0				0	0	363.8	4.7	10	
Nickel	2.14	1.8				0	0	3.821		10	N
Vanadium	17.6	3.7				0	0	17.13		10	N
Zinc	131	2.4				0	0	127	3.0	10	

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_141002A: 26** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-066APDS** Method: **SW6010B**

Analysis Date: **10/02/14 10:26** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5370	5.0	1301	4016	104	75	125				
Barium	347	1.0	260.1	95.29	97	75	125				
Cobalt	244	1.0	260.1		94	75	125				
Copper	312	1.1	260.1	49.37	101	75	125				
Iron	8370	5.0	1301	6974		75	125				A
Manganese	1660	1.0	1301	363.8	100	75	125				
Nickel	263	1.0	260.1	3.821	100	75	125				
Vanadium	275	1.0	260.1	17.13	99	75	125				
Zinc	369	1.0	260.1	127	93	75	125				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_141002A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14090234-066AMS** Method: **SW6010B**

Analysis Date: **10/02/14 10:30** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3940	5.0	252.5	4016		75	125				A
Barium	118	1.0	50.51	95.29	45	75	125				S
Cobalt	52.8	1.0	50.51		104	75	125				
Copper	122	1.1	50.51	49.37	144	75	125				S
Iron	7410	5.0	252.5	6974		75	125				A
Manganese	624	1.0	252.5	363.8	103	75	125				
Nickel	57.3	1.0	50.51	3.821	106	75	125				
Vanadium	66.9	1.0	50.51	17.13	99	75	125				
Zinc	175	1.0	50.51	127	95	75	125				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_141002A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-066AMSD** Method: **SW6010B**

Analysis Date: **10/02/14 10:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3820	5.0	252.5	4016		75	125	3943	3.2	20	A
Barium	117	1.0	50.51	95.29	42	75	125	118	1.2	20	S
Cobalt	48.4	1.0	50.51		96	75	125	52.76	8.7	20	
Copper	95.4	1.1	50.51	49.37	91	75	125	122.3	25	20	R
Iron	6200	5.0	252.5	6974		75	125	7415	18	20	A
Manganese	652	1.0	252.5	363.8	114	75	125	623.6	4.4	20	
Nickel	56.7	1.0	50.51	3.821	105	75	125	57.31	1.2	20	
Vanadium	67.3	1.0	50.51	17.13	99	75	125	66.95	0.5	20	
Zinc	158	1.0	50.51	127	62	75	125	175.1	10	20	S

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 89** SampType: **Method Blank** Lab ID: **MB-26335** Method: **SW6020**
Analysis Date: **09/30/14 18:36** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	5	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICPMS204-B_140930A: 90** SampType: **Laboratory Control Sample** Lab ID: **LCS-26335** Method: **SW6020**
Analysis Date: **09/30/14 18:41** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.3	1.0	126	0.376	**36**	2.2	92.9				
Arsenic	296	1.0	343		**86**	72.3	106.4				
Beryllium	44.2	1.0	51		**87**	76.3	108.6				
Boron	74.8	4.7	93.2	4.962	**75**	59.4	101.9				
Cadmium	120	1.0	137		**87**	73	105.1				
Chromium	70.7	1.0	76		**93**	72.8	109.1				
Lead	178	1.0	187		**95**	75.9	108.6				
Molybdenum	145	1.0	172		**84**	68.6	105.8				
Selenium	185	1.0	196		**94**	72.5	112.2				
Silver	60.4	1.0	69		**88**	67.8	112.8				
Uranium	107	1.0	100		**107**	80	120				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICPMS204-B_140930A: 91** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26335** Method: **SW6020**
Analysis Date: **09/30/14 18:45** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.2	1.0	50	0.376	**98**	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 91** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26335** Method: **SW6020**
Analysis Date: **09/30/14 18:45** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.4	1.0	50		103	80	120				
Beryllium	24.9	1.0	25		100	80	120				
Boron	51.2	4.5	50	4.962	93	80	120				
Cadmium	25.6	1.0	25		102	80	120				
Chromium	51.8	1.0	50		104	80	120				
Lead	48.9	1.0	50		98	80	120				
Molybdenum	48.6	1.0	50		97	80	120				
Selenium	52.7	1.0	50		105	80	120				
Silver	23.9	1.0	25		96	80	120				
Uranium	48.1	1.0	50		96	80	120				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICPMS204-B_140930A: 120** SampType: **Serial Dilution** Lab ID: **H14090234-066ADIL** Method: **SW6020**
Analysis Date: **09/30/14 20:53** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1649		10	
Arsenic	13.5	1.6				0	0	14.08		10	N
Beryllium	ND	1.0				0	0			10	
Boron	ND	23				0	0			10	
Cadmium	ND	1.0				0	0	0.2843		10	
Chromium	8.21	1.0				0	0	8.323		10	N
Lead	18.7	1.2				0	0	18.33	2.0	10	
Molybdenum	ND	1.0				0	0	0.4944		10	
Selenium	ND	1.8				0	0			10	
Silver	ND	1.3				0	0			10	
Uranium	ND	1.0				0	0	0.8364		10	

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICPMS204-B_140930A: 121** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-066APDS** Method: **SW6020**
Analysis Date: **09/30/14 20:57** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2410	1.0	2526	0.1649	95	75	125				
Arsenic	2480	1.0	2526	14.08	98	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 121** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-066APDS** Method: **SW6020**

Analysis Date: **09/30/14 20:57** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	1160	1.0	1263		92	75	125				
Boron	2320	4.5	2526		92	75	125				
Cadmium	1190	1.0	1263	0.2843	94	75	125				
Chromium	2420	1.0	2526	8.323	95	75	125				
Lead	2380	1.0	2526	18.33	93	75	125				
Molybdenum	2400	1.0	2526	0.4944	95	75	125				
Selenium	2450	1.0	2526		97	75	125				
Silver	849	1.0	1263		67	75	125				S
Uranium	2460	1.0	2526	0.8364	97	75	125				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICPMS204-B_140930A: 122** SampType: **Sample Matrix Spike** Lab ID: **H14090234-066AMS** Method: **SW6020**

Analysis Date: **09/30/14 21:01** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	42.6	1.0	50.51	0.1649	84	75	125				
Arsenic	68.4	1.0	50.51	14.08	108	75	125				
Beryllium	24.6	1.0	25.25		98	75	125				
Boron	63.3	4.5	50.51		125	75	125				
Cadmium	25.7	1.0	25.25	0.2843	100	75	125				
Chromium	59.6	1.0	50.51	8.323	102	75	125				
Lead	65.6	1.0	50.51	18.33	94	75	125				
Molybdenum	50.1	1.0	50.51	0.4944	98	75	125				
Selenium	55.6	1.0	50.51		110	75	125				
Silver	28.4	1.0	25.25		112	75	125				
Uranium	49.3	1.0	50.51	0.8364	96	75	125				

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICPMS204-B_140930A: 123** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-066AMSD** Method: **SW6020**

Analysis Date: **09/30/14 21:05** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	40.9	1.0	50.51	0.1649	81	75	125	42.6	4.1	20	
Arsenic	64.6	1.0	50.51	14.08	100	75	125	68.41	5.7	20	
Beryllium	24.9	1.0	25.25		99	75	125	24.65	1.0	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 123** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-066AMSD** Method: **SW6020**

Analysis Date: **09/30/14 21:05** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	57.3	4.5	50.51		114	75	125	63.28	9.9	20	
Cadmium	26.0	1.0	25.25	0.2843	102	75	125	25.66	1.2	20	
Chromium	59.2	1.0	50.51	8.323	101	75	125	59.65	0.7	20	
Lead	63.0	1.0	50.51	18.33	88	75	125	65.56	4.0	20	
Molybdenum	49.3	1.0	50.51	0.4944	97	75	125	50.13	1.6	20	
Selenium	54.8	1.0	50.51		109	75	125	55.61	1.4	20	
Silver	26.9	1.0	25.25		107	75	125	28.38	5.2	20	
Uranium	49.1	1.0	50.51	0.8364	96	75	125	49.32	0.5	20	

Associated samples: **H14090233-006A, H14090233-006B, H14090233-009A, H14090233-009B, H14090233-012A, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26387

Date: *12-Oct-14*

Run ID :Run Order: **HGCV201-H_141002B: 6** SampType: **Method Blank** Lab ID: **MB-26387** Method: **SW7471B**
Analysis Date: **10/02/14 14:55** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0003	0.0003									

Associated samples: **H14090233-012A**

Run ID :Run Order: **HGCV201-H_141002B: 8** SampType: **Laboratory Control Sample** Lab ID: **LCS-26387** Method: **SW7471B**
Analysis Date: **10/02/14 15:30** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.9	0.50	4.965	0.000342	98	80	120				

Associated samples: **H14090233-012A**

Run ID :Run Order: **HGCV201-H_141002B: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26387** Method: **SW7471B**
Analysis Date: **10/02/14 15:32** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1	0.000342	103	80	120				

Associated samples: **H14090233-012A**

Run ID :Run Order: **HGCV201-H_141002B: 11** SampType: **Sample Matrix Spike** Lab ID: **H14090233-012AMS** Method: **SW7471B**
Analysis Date: **10/02/14 15:37** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.994	0.00977	110	80	120				

Associated samples: **H14090233-012A**

Run ID :Run Order: **HGCV201-H_141002B: 12** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-012AMSD** Method: **SW7471B**
Analysis Date: **10/02/14 15:39** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.994	0.00977	117	80	120	1.099	6.2	20	

Associated samples: **H14090233-012A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100503

Date: *12-Oct-14*

Run ID :Run Order: **FIA203-HE_140912B: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **09/12/14 14:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.03	0.010	1		103	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140912B: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **09/12/14 14:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.925	0.011	1		93	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140912B: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **09/12/14 14:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	-0.0129	0.010				0	0				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140912B: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **09/12/14 14:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	ND	0.001									

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140912B: 69** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **09/12/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.462	0.010	0.5		92	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140912B: 71** SampType: **Sample Matrix Spike** Lab ID: **H14090221-002BMS** Method: **E353.2**
Analysis Date: **09/12/14 15:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.936	0.011	1	0.03898	90	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100503

Date: *12-Oct-14*

Run ID :Run Order: **FIA203-HE_140912B: 72** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090221-002BMSD** Method: **E353.2**

Analysis Date: **09/12/14 15:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.919	0.011	1	0.03898	88	90	110	0.9361	1.8	20	S

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100537

Date: *12-Oct-14*

Run ID :Run Order: **PHSC_101-H_140915A: 88** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **09/15/14 17:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2	2									

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **PHSC_101-H_140915A: 90** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **09/15/14 17:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	590	4.0	600	2.12	99	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **PHSC_101-H_140915A: 93** SampType: **Sample Duplicate** Lab ID: **H14070369-003ADUP** Method: **A2320 B**
Analysis Date: **09/15/14 17:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	99	4.0						97.15	1.7	10	
Bicarbonate as HCO3	120	4.0						117.9	1.7	10	

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **PHSC_101-H_140915A: 101** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001AMS** Method: **A2320 B**
Analysis Date: **09/15/14 18:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	670	4.0	600	100.3	94	80	120				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **PHSC_101-H_140915A: 134** SampType: **Sample Duplicate** Lab ID: **H14090234-014ADUP** Method: **A2320 B**
Analysis Date: **09/15/14 20:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	100	4.0						98.75	1.4	10	
Bicarbonate as HCO3	110	4.0						111.2	1.7	10	

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**
Analysis Date: **09/15/14 10:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.797	0.10	0.8		100	95	105				
Calcium	40.2	1.0	40		101	95	105				
Magnesium	40.7	1.0	40		102	95	105				
Potassium	40.5	1.0	40		101	95	105				
Sodium	40.5	1.0	40		101	95	105				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**
Analysis Date: **09/15/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.60	0.10	2.5		104	95	105				
Calcium	25.5	1.0	25		102	95	105				
Magnesium	25.6	1.0	25		102	95	105				
Potassium	24.8	1.0	25		99	95	105				
Sodium	24.9	1.0	25		100	95	105				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **09/15/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.00368	0.10				0	0				
Calcium	474	1.0	500		95	80	120				
Magnesium	514	1.0	500		103	80	120				
Potassium	-0.302	1.0				0	0				
Sodium	-0.00284	1.0				0	0				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **09/15/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.999	0.10	1		100	80	120				
Calcium	476	1.0	500		95	80	120				
Magnesium	512	1.0	500		102	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **09/15/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	20.0	1.0	20		100	80	120				
Sodium	20.2	1.0	20		101	80	120				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**
Analysis Date: **09/15/14 10:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.05	0.03									
Magnesium	ND	0.02									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**
Analysis Date: **09/15/14 11:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.941	0.10	1		94	85	115				
Calcium	46.8	1.0	50	0.04577	94	85	115				
Magnesium	47.1	1.0	50		94	85	115				
Potassium	48.2	1.0	50		96	85	115				
Sodium	48.6	1.0	50		97	85	115				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **09/15/14 11:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.45	0.10	2.5		98	90	110				
Calcium	24.5	1.0	25		98	90	110				
Magnesium	24.2	1.0	25		97	90	110				
Potassium	24.3	1.0	25		97	90	110				
Sodium	24.7	1.0	25		99	90	110				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **09/15/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.55	0.10	2.5		102	90	110				
Calcium	24.5	1.0	25		98	90	110				
Magnesium	24.4	1.0	25		98	90	110				
Potassium	24.9	1.0	25		100	90	110				
Sodium	25.3	1.0	25		101	90	110				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001BMS2** Method: **E200.7**
Analysis Date: **09/15/14 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.01	0.050	1	0.01765	99	70	130				
Calcium	83.0	1.0	50	34.16	98	70	130				
Magnesium	57.5	1.0	50	8.286	98	70	130				
Potassium	53.9	1.0	50	2.539	103	70	130				
Sodium	63.7	1.0	50	12.14	103	70	130				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICP2-HE_140915A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001BMSD2** Method: **E200.7**
Analysis Date: **09/15/14 12:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.01	0.050	1	0.01765	100	70	130	1.006	0.9	20	
Calcium	83.2	1.0	50	34.16	98	70	130	82.95	0.2	20	
Magnesium	57.8	1.0	50	8.286	99	70	130	57.46	0.6	20	
Potassium	53.6	1.0	50	2.539	102	70	130	53.88	0.6	20	
Sodium	63.5	1.0	50	12.14	103	70	130	63.67	0.3	20	

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100567

Date: *12-Oct-14*

Run ID :Run Order: **FIA202-HE_140915A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**

Analysis Date: **09/15/14 15:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.250	0.010	0.25		100	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA202-HE_140915A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**

Analysis Date: **09/15/14 15:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-0.000600	0.010				0	0				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA202-HE_140915A: 56** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**

Analysis Date: **09/15/14 15:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.106	0.010	0.1		106	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100569

Date: *12-Oct-14*

Run ID :Run Order: **IC102-H_140915A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **09/15/14 14:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		101	90	110				
Sulfate	400	1.0	400		100	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **IC102-H_140915A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **09/15/14 14:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.008									
Sulfate	ND	0.08									

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **IC102-H_140915A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **09/15/14 15:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	48	1.0	50		96	90	110				
Sulfate	200	1.0	200		98	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **IC102-H_140915A: 15** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV091514-1** Method: **E300.0**
Analysis Date: **09/15/14 15:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		101	90	110				
Sulfate	400	1.0	400		101	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **IC102-H_140915A: 32** SampType: **Sample Matrix Spike** Lab ID: **H14090234-001AMS** Method: **E300.0**
Analysis Date: **09/15/14 18:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	79	1.0	50	26.59	104	90	110				
Sulfate	320	1.0	200	102	107	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100569

Date: *12-Oct-14*

Run ID :Run Order: **IC102-H_140915A: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-001AMSD** Method: **E300.0**

Analysis Date: **09/15/14 18:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	79	1.0	50	26.59	**105**	90	110	78.8	**0.3**	20	
Sulfate	320	1.0	200	102	**109**	90	110	316	**1.4**	20	

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100588

Date: *12-Oct-14*

Run ID :Run Order: **FIA203-HE_140916A: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **09/16/14 11:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	14.3	0.50	15.2		94	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **09/16/14 11:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.935	0.055	1		93	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 10** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **09/16/14 11:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.476	0.050	0.5		95	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **09/16/14 11:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0631	0.050				0	0				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 21** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001DMS** Method: **E350.1**
Analysis Date: **09/16/14 11:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.847	0.055	1		85	80	120				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 22** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001DMSD** Method: **E350.1**
Analysis Date: **09/16/14 11:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.821	0.055	1		82	80	120	0.8472	3.1	10	

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100588

Date: *12-Oct-14*

Run ID :Run Order: **FIA203-HE_140916A: 24** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**

Analysis Date: **09/16/14 11:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.465	0.050	0.5		93	90	110				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14090233-003DMS** Method: **E350.1**

Analysis Date: **09/16/14 11:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.876	0.055	1		88	80	120				

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Run ID :Run Order: **FIA203-HE_140916A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-003DMSD** Method: **E350.1**

Analysis Date: **09/16/14 11:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.844	0.055	1		84	80	120	0.8759	3.7	10	

Associated samples: **H14090233-001D, H14090233-002D, H14090233-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100597

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**
Analysis Date: **09/16/14 08:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.782	0.10	0.8		98	95	105				
Calcium	39.2	1.0	40		98	95	105				
Magnesium	39.0	1.0	40		97	95	105				
Sodium	38.8	1.0	40		97	95	105				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**
Analysis Date: **09/16/14 08:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.46	0.10	2.5		98	95	105				
Calcium	24.9	1.0	25		100	95	105				
Magnesium	24.7	1.0	25		99	95	105				
Sodium	25.1	1.0	25		100	95	105				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **09/16/14 08:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.00349	0.10				0	0				
Calcium	465	1.0	500		93	80	120				
Magnesium	491	1.0	500		98	80	120				
Sodium	0.0307	1.0				0	0				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Run ID :Run Order: **ICP2-HE_140916B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **09/16/14 08:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.02	0.10	1		102	80	120				
Calcium	462	1.0	500		92	80	120				
Magnesium	492	1.0	500		98	80	120				
Sodium	19.6	1.0	20		98	80	120				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100597

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/16/14 13:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 4	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.45	0.10	2.5		98	90	110				
Calcium	25.2	1.0	25		101	90	110				
Magnesium	25.0	1.0	25		100	90	110				
Sodium	25.4	1.0	25		102	90	110				

Associated samples: **H14090233-001C, H14090233-002C, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **09/17/14 11:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.301	0.10	0.3		100	90	110				
Antimony	0.0608	0.050	0.06		101	90	110				
Arsenic	0.0617	0.0050	0.06		103	90	110				
Barium	0.0599	0.10	0.06		100	90	110				
Beryllium	0.0302	0.0010	0.03		101	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Chromium	0.0626	0.010	0.06		104	90	110				
Cobalt	0.0605	0.010	0.06		101	90	110				
Copper	0.0633	0.010	0.06		105	90	110				
Iron	0.324	0.020	0.3		108	90	110				
Lead	0.0595	0.010	0.06		99	90	110				
Manganese	0.299	0.010	0.3		100	90	110				
Molybdenum	0.0606	0.0050	0.06		101	90	110				
Nickel	0.0633	0.010	0.06		105	90	110				
Potassium	3.19	0.50	3		106	90	110				
Selenium	0.0629	0.0050	0.06		105	90	110				
Silver	0.0301	0.0050	0.03		100	90	110				
Uranium	0.0601	0.0010	0.06		100	90	110				
Vanadium	0.0610	0.10	0.06		102	90	110				
Zinc	0.0636	0.010	0.06		106	90	110				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **ICPMS204-B_140917A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/17/14 11:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.7	0.10	40		94	70	130				
Antimony	7.60E-05	0.050									
Arsenic	7.10E-05	0.0050									
Barium	0.000121	0.10									
Beryllium	1.00E-05	0.0010									
Cadmium	0.000509	0.0010									
Chromium	0.00108	0.010									
Cobalt	0.000212	0.010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/17/14 11:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.000371	0.010									
Iron	99.3	0.020	100		99	70	130				
Lead	0.000241	0.010									
Manganese	-0.000145	0.010									
Molybdenum	0.834	0.0050	0.8		104	70	130				
Nickel	0.000656	0.010									
Potassium	40.6	0.50	40		101	70	130				
Selenium	0.000132	0.0050									
Silver	0.000157	0.0050									
Uranium	3.70E-05	0.0010									
Vanadium	7.90E-05	0.10									
Zinc	0.00152	0.010									

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **ICPMS204-B_140917A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/17/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.1	0.10	40		93	70	130				
Antimony	0.000578	0.050				0	0				
Arsenic	0.0106	0.0050	0.01		106	70	130				
Barium	0.000147	0.10				0	0				
Beryllium	7.00E-06	0.0010				0	0				
Cadmium	0.00976	0.0010	0.01		98	70	130				
Chromium	0.0211	0.010	0.02		105	70	130				
Cobalt	0.0196	0.010	0.02		98	70	130				
Copper	0.0201	0.010	0.02		101	70	130				
Iron	97.3	0.020	100		97	70	130				
Lead	0.000258	0.010				0	0				
Manganese	0.0191	0.010	0.02		96	70	130				
Molybdenum	0.820	0.0050	0.8		102	70	130				
Nickel	0.0207	0.010	0.02		103	70	130				
Potassium	40.1	0.50	40		100	70	130				
Selenium	0.0120	0.0050	0.01		120	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/17/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0177	0.0050	0.02		89	70	130				
Uranium	1.80E-05	0.0010				0	0				
Vanadium	0.0205	0.10	0.02		103	70	130				
Zinc	0.0119	0.010	0.01		119	70	130				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Run ID :Run Order: **ICPMS204-B_140917A: 18** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **09/17/14 13:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	ND	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	ND	3E-05									
Iron	0.0007	0.0002									
Lead	ND	8E-06									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									
Potassium	ND	0.05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	ND	0.0003									

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 19** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **09/17/14 13:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0503	0.10	0.05		101	85	115				
Antimony	0.0496	0.050	0.05		99	85	115				
Arsenic	0.0518	0.0050	0.05		104	85	115				
Barium	0.0506	0.10	0.05		101	85	115				
Beryllium	0.0505	0.0010	0.05		101	85	115				
Cadmium	0.0520	0.0010	0.05		104	85	115				
Chromium	0.0514	0.010	0.05		103	85	115				
Cobalt	0.0512	0.010	0.05		102	85	115				
Copper	0.0523	0.010	0.05		105	85	115				
Iron	0.161	0.020	0.15	0.0006622	107	85	115				
Lead	0.0502	0.010	0.05		100	85	115				
Manganese	0.0508	0.010	0.05		102	85	115				
Molybdenum	0.0504	0.0050	0.05		101	85	115				
Nickel	0.0523	0.010	0.05		105	85	115				
Potassium	0.982	0.50	1		98	85	115				
Selenium	0.0539	0.0050	0.05		108	85	115				
Silver	0.0208	0.0050	0.02		104	85	115				
Uranium	0.0488	0.0010	0.05		98	85	115				
Vanadium	0.0503	0.10	0.05		101	85	115				
Zinc	0.0554	0.010	0.05		111	85	115				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICPMS204-B_140917A: 130** SampType: **Sample Matrix Spike** Lab ID: **H14090221-002CMS** Method: **E200.8**

Analysis Date: **09/17/14 23:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.107	0.030	0.05	0.05811	97	70	130				
Antimony	0.0711	0.0010	0.05	0.02417	94	70	130				
Arsenic	0.0560	0.0010	0.05	0.002202	108	70	130				
Barium	0.0715	0.050	0.05	0.02258	98	70	130				
Beryllium	0.0500	0.0010	0.05		100	70	130				
Cadmium	0.0498	0.0010	0.05	0.000513	99	70	130				
Chromium	0.0509	0.0050	0.05	0.0000618	102	70	130				
Cobalt	0.0491	0.0050	0.05	0.0006083	97	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 130** SampType: **Sample Matrix Spike** Lab ID: **H14090221-002CMS** Method: **E200.8**

Analysis Date: **09/17/14 23:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0628	0.0050	0.05	0.01147	103	70	130				
Iron	0.236	0.020	0.15	0.08608	100	70	130				
Lead	0.0618	0.0010	0.05	0.01244	99	70	130				
Manganese	0.455	0.0010	0.05	0.4222		70	130				A
Molybdenum	0.199	0.0010	0.05	0.1548	89	70	130				
Nickel	0.0532	0.0050	0.05	0.002231	102	70	130				
Potassium	8.20	1.0	1	7.367		70	130				A
Selenium	0.0539	0.0010	0.05	0.0005069	107	70	130				
Silver	0.0162	0.0010	0.02	0.0000496	81	70	130				
Uranium	0.0507	0.00030	0.05	0.000849	100	70	130				
Vanadium	0.0517	0.010	0.05	0.0004564	102	70	130				
Zinc	0.101	0.010	0.05	0.04832	105	70	130				

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICPMS204-B_140917A: 131** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090221-002CMSD** Method: **E200.8**

Analysis Date: **09/17/14 23:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.102	0.030	0.05	0.05811	88	70	130	0.1066	4.1	20	
Antimony	0.0720	0.0010	0.05	0.02417	96	70	130	0.07113	1.2	20	
Arsenic	0.0558	0.0010	0.05	0.002202	107	70	130	0.05596	0.3	20	
Barium	0.0712	0.050	0.05	0.02258	97	70	130	0.07147	0.4	20	
Beryllium	0.0504	0.0010	0.05		101	70	130	0.04997	1.0	20	
Cadmium	0.0505	0.0010	0.05	0.000513	100	70	130	0.04983	1.3	20	
Chromium	0.0512	0.0050	0.05	0.0000618	102	70	130	0.05091	0.6	20	
Cobalt	0.0495	0.0050	0.05	0.0006083	98	70	130	0.0491	0.8	20	
Copper	0.0628	0.0050	0.05	0.01147	103	70	130	0.06276	0.0	20	
Iron	0.233	0.020	0.15	0.08608	98	70	130	0.2355	1.2	20	
Lead	0.0619	0.0010	0.05	0.01244	99	70	130	0.06175	0.3	20	
Manganese	0.459	0.0010	0.05	0.4222		70	130	0.4553	0.8	20	A
Molybdenum	0.199	0.0010	0.05	0.1548	88	70	130	0.1992	0.2	20	
Nickel	0.0536	0.0050	0.05	0.002231	103	70	130	0.05325	0.7	20	
Potassium	8.21	1.0	1	7.367		70	130	8.197	0.1	20	A
Selenium	0.0543	0.0010	0.05	0.0005069	108	70	130	0.0539	0.8	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 131** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090221-002CMSD** Method: **E200.8**

Analysis Date: **09/17/14 23:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0161	0.0010	0.02	0.0000496	**80**	70	130	0.01621	**0.6**	20	
Uranium	0.0515	0.00030	0.05	0.000849	**101**	70	130	0.05073	**1.6**	20	
Vanadium	0.0517	0.010	0.05	0.0004564	**103**	70	130	0.05166	**0.1**	20	
Zinc	0.0993	0.010	0.05	0.04832	**102**	70	130	0.1006	**1.3**	20	

Associated samples: **H14090233-001B, H14090233-002B, H14090233-003B**

Run ID :Run Order: **ICPMS204-B_140917A: 150** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/18/14 00:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.2	0.10	40		**93**	70	130				
Antimony	3.00E-05	0.050									
Arsenic	9.90E-05	0.0050									
Barium	0.000114	0.10									
Beryllium	-2.00E-06	0.0010									
Cadmium	0.000509	0.0010									
Chromium	0.00104	0.010									
Cobalt	0.000234	0.010									
Copper	0.000407	0.010									
Iron	97.5	0.020	100		**98**	70	130				
Lead	0.000235	0.010									
Manganese	-0.000243	0.010									
Molybdenum	0.823	0.0050	0.8		**103**	70	130				
Nickel	0.000644	0.010									
Potassium	40.4	0.50	40		**101**	70	130				
Selenium	6.80E-05	0.0050									
Silver	6.80E-05	0.0050									
Uranium	5.00E-06	0.0010									
Vanadium	0.000113	0.10									
Zinc	0.00163	0.010									

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 151** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/18/14 00:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 20	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	36.6	0.10	40		91	70	130				
Antimony	0.000548	0.050				0	0				
Arsenic	0.0113	0.0050	0.01		113	70	130				
Barium	0.000117	0.10				0	0				
Beryllium	-1.30E-05	0.0010				0	0				
Cadmium	0.00998	0.0010	0.01		100	70	130				
Chromium	0.0216	0.010	0.02		108	70	130				
Cobalt	0.0196	0.010	0.02		98	70	130				
Copper	0.0208	0.010	0.02		104	70	130				
Iron	100	0.020	100		100	70	130				
Lead	0.000254	0.010				0	0				
Manganese	0.0186	0.010	0.02		93	70	130				
Molybdenum	0.827	0.0050	0.8		103	70	130				
Nickel	0.0213	0.010	0.02		106	70	130				
Potassium	40.8	0.50	40		102	70	130				
Selenium	0.0124	0.0050	0.01		124	70	130				
Silver	0.0178	0.0050	0.02		89	70	130				
Uranium	6.00E-06	0.0010				0	0				
Vanadium	0.0208	0.10	0.02		104	70	130				
Zinc	0.0115	0.010	0.01		115	70	130				

Associated samples: **H14090233-001B, H14090233-001C, H14090233-002B, H14090233-002C, H14090233-003B, H14090233-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100687

Date: *12-Oct-14*

Run ID :Run Order: **FIA203-HE_140919A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **09/18/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.00612	0.10				0	0				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Run ID :Run Order: **FIA203-HE_140919A: 29** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **09/18/14 15:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.515	0.10	0.5		103	90	110				

Associated samples: **H14090233-001A, H14090233-002A, H14090233-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100994

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **09/30/14 08:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.07	0.10	4		102	90	110				
Barium	0.796	0.10	0.8		100	90	110				
Cobalt	0.782	0.010	0.8		98	90	110				
Copper	0.806	0.010	0.8		101	90	110				
Iron	4.05	0.020	4		101	90	110				
Manganese	3.99	0.010	4		100	90	110				
Nickel	0.781	0.010	0.8		98	90	110				
Vanadium	0.810	0.10	0.8		101	90	110				
Zinc	0.789	0.010	0.8		99	90	110				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_140930A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **09/30/14 08:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	537	0.10	500		107	80	120				
Barium	0.000360	0.10				0	0				
Cobalt	-0.00863	0.010				0	0				
Copper	0.00216	0.010				0	0				
Iron	194	0.020	200		97	80	120				
Manganese	-0.00708	0.010				0	0				
Nickel	0.00464	0.010				0	0				
Vanadium	0.000310	0.10				0	0				
Zinc	0.00411	0.010				0	0				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012A, H14090233-012B**

Run ID :Run Order: **ICP2-HE_140930A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **09/30/14 08:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	533	0.10	500		107	80	120				
Barium	0.500	0.10	0.5		100	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100994

Date: *12-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **09/30/14 08:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.474	0.010	0.5		95	80	120				
Copper	0.505	0.010	0.5		101	80	120				
Iron	192	0.020	200		96	80	120				
Manganese	0.483	0.010	0.5		97	80	120				
Nickel	0.956	0.010	1		96	80	120				
Vanadium	0.489	0.10	0.5		98	80	120				
Zinc	1.00	0.010	1		100	80	120				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012A, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100996

Date: *12-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **09/30/14 12:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0606	0.0010	0.06		101	90	110				
Arsenic	0.0610	0.0010	0.06		102	90	110				
Beryllium	0.0311	0.0010	0.03		104	90	110				
Boron	0.0624	0.0010	0.06		104	90	110				
Cadmium	0.0318	0.0010	0.03		106	90	110				
Chromium	0.0611	0.0010	0.06		102	90	110				
Lead	0.0607	0.0010	0.06		101	90	110				
Molybdenum	0.0608	0.0010	0.06		101	90	110				
Selenium	0.0610	0.0010	0.06		102	90	110				
Silver	0.0296	0.0010	0.03		99	90	110				
Uranium	0.0604	0.00030	0.06		101	90	110				

Associated samples: **H14090233-004A, H14090233-004B, H14090233-005A, H14090233-005B, H14090233-006A, H14090233-006B, H14090233-007A, H14090233-007B, H14090233-008A, H14090233-008B, H14090233-009A, H14090233-009B, H14090233-010A, H14090233-010B, H14090233-011A, H14090233-011B, H14090233-012A, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101084

Date: *12-Oct-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 3** SampType: **Sample Duplicate** Lab ID: **H14090233-005BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	21.9	0.20						21.98			

Associated samples: **H14090233-004B, H14090233-005B, H14090233-006B, H14090233-007B, H14090233-008B, H14090233-009B, H14090233-010B, H14090233-011B, H14090233-012B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140912A

Date: *12-Oct-14*

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 2** SampType: **Method Blank** Lab ID: **MB-25_140912A** Method: **A2540 D**
Analysis Date: **09/12/14 14:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14090233-003A**

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-26_140912A** Method: **A2540 D**
Analysis Date: **09/12/14 14:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	92.0	10	100		92	80	120				

Associated samples: **H14090233-003A**

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 2** SampType: **Sample Duplicate** Lab ID: **H14090214-013A DUP** Method: **A2540 D**
Analysis Date: **09/12/14 14:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	2.40	4.0						2		5	

Associated samples: **H14090233-003A**

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 3** SampType: **Sample Duplicate** Lab ID: **H14090214-023A DUP** Method: **A2540 D**
Analysis Date: **09/12/14 14:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	25.2	4.0						23.6	6.6	5	R

Associated samples: **H14090233-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14090233
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140915A

Date: *12-Oct-14*

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 1** SampType: **Method Blank** Lab ID: **MB-1_140915A** Method: **A2540 D**
Analysis Date: **09/15/14 14:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14090233-001A, H14090233-002A**

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_140915A** Method: **A2540 D**
Analysis Date: **09/15/14 14:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	101	10	100		**101**	80	120				

Associated samples: **H14090233-001A, H14090233-002A**

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 4** SampType: **Sample Duplicate** Lab ID: **H14090235-001A DUP** Method: **A2540 D**
Analysis Date: **09/15/14 14:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	113	33						110	**3.0**	5	

Associated samples: **H14090233-001A, H14090233-002A**

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 1** SampType: **Sample Duplicate** Lab ID: **H14090241-001A DUP** Method: **A2540 D**
Analysis Date: **09/15/14 14:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	24.0	10						27	**12**	5	R

Associated samples: **H14090233-001A, H14090233-002A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

Natural Resource Damage Program H14090233

Login completed by: Tracy L. Lorash
Date Received: 9/12/2014
Reviewed by: BL2000\rwilliams
Received by: tsp
Reviewed Date: 9/16/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Cooler 1 was received at 0.7°C, Coolers 2 and 3 at 0.2°C, Cooler 4 at 0.4°C, Box 1 at 16.1°C, Box 2 at 17.6°C. Samples in coolers were received on wet ice with temperatures taken from a temperature blank. Samples in boxes were not received on ice and temperatures were taken from a client sample. TI 9/12/14

ANALYTICAL SUMMARY REPORT

October 16, 2014

MT DEQ-Federal Superfund
PO Box 200901
Helena, MT 59620-0901

Work Order: H14090234 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 66 samples for MT DEQ-Federal Superfund on 9/12/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14090234-001	SS-06G	09/11/14 11:00	09/12/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14090234-002	SS-07	09/11/14 10:00	09/12/14	Aqueous	Same As Above
H14090234-003	SS-08	09/10/14 16:00	09/12/14	Aqueous	Same As Above
H14090234-004	Duplicate #2 (SS-08)	09/10/14 16:00	09/12/14	Aqueous	Same As Above
H14090234-005	Field Blank #2	09/10/14 17:30	09/12/14	Aqueous	Same As Above
H14090234-006	SS-10A	09/10/14 14:00	09/12/14	Aqueous	Same As Above
H14090234-007	SS-10B	09/10/14 13:00	09/12/14	Aqueous	Same As Above
H14090234-008	SS-11C	09/10/14 12:30	09/12/14	Aqueous	Same As Above
H14090234-009	SS-11D	09/10/14 11:00	09/12/14	Aqueous	Same As Above
H14090234-010	SS-13	09/10/14 9:00	09/12/14	Aqueous	Same As Above
H14090234-011	SS-14	09/09/14 18:45	09/12/14	Aqueous	Same As Above
H14090234-012	SS-14 Duplicate #1	09/09/14 18:45	09/12/14	Aqueous	Same As Above
H14090234-013	Field Blank #1	09/09/14 20:00	09/12/14	Aqueous	Same As Above
H14090234-014	SS-15A	09/09/14 16:30	09/12/14	Aqueous	Same As Above
H14090234-015	SS-15B	09/09/14 15:00	09/12/14	Aqueous	Same As Above
H14090234-016	SS-16B	09/09/14 13:00	09/12/14	Aqueous	Same As Above
H14090234-017	SS-17D	09/09/14 11:00	09/12/14	Aqueous	Same As Above
H14090234-018	SS-19	09/09/14 9:00	09/12/14	Aqueous	Same As Above

ANALYTICAL SUMMARY REPORT

H14090234-019	SS-06G Sediment Sieve <0.065mm	09/11/14 11:00	09/12/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves Soil Preparation
H14090234-020	SS-06G Sediment Sieve 0.065-1mm	09/11/14 11:00	09/12/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14090234-021	SS-06G Sediment Sieve 1-2mm	09/11/14 11:00	09/12/14	Sediment	Same As Above
H14090234-022	SS-07 Sediment Sieve <0.065mm	09/11/14 10:00	09/12/14	Sediment	Same As Above
H14090234-023	SS-07 Sediment Sieve 0.065-1mm	09/11/14 10:00	09/12/14	Sediment	Same As Above
H14090234-024	SS-07 Sediment Sieve 1-2mm	09/11/14 10:00	09/12/14	Sediment	Same As Above
H14090234-025	SS-08 Sediment Sieve <0.065mm	09/10/14 16:00	09/12/14	Sediment	Same As Above
H14090234-026	SS-08 Sediment Sieve 0.065-1mm	09/10/14 16:00	09/12/14	Sediment	Same As Above
H14090234-027	SS-08 Sediment Sieve 1-2mm	09/10/14 16:00	09/12/14	Sediment	Same As Above
H14090234-028	SS-10A Sediment Sieve <0.065mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-029	SS-10A Sediment Sieve 0.065-1mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-030	SS-10A Sediment Sieve 1-2mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-031	SS-10A Duplicate #1 Sediment Sieve <0.065mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-032	SS-10A Duplicate #1 Sediment Sieve 0.065-1mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-033	SS-10A Duplicate #1 Sediment Sieve 1-2mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-034	SS-10A Duplicate #2 Sediment Sieve <0.065mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-035	SS-10A Duplicate #2 Sediment Sieve 0.065-1mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-036	SS-10A Duplicate #2 Sediment Sieve 1-2mm	09/10/14 14:00	09/12/14	Sediment	Same As Above
H14090234-037	SS-10B Sediment Sieve <0.065mm	09/10/14 13:00	09/12/14	Sediment	Same As Above
H14090234-038	SS-10B Sediment Sieve 0.065-1mm	09/10/14 13:00	09/12/14	Sediment	Same As Above
H14090234-039	SS-10B Sediment Sieve 1-2mm	09/10/14 13:00	09/12/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14090234-040	SS-11C Sediment Sieve <0.065mm	09/10/14 12:30	09/12/14	Sediment	Same As Above
H14090234-041	SS-11C Sediment Sieve 0.065-1mm	09/10/14 12:30	09/12/14	Sediment	Same As Above
H14090234-042	SS-11C Sediment Sieve 1-2mm	09/10/14 12:30	09/12/14	Sediment	Same As Above
H14090234-043	SS-11D Sediment Sieve <0.065mm	09/10/14 11:00	09/12/14	Sediment	Same As Above
H14090234-044	SS-11D Sediment Sieve 0.065-1mm	09/10/14 11:00	09/12/14	Sediment	Same As Above
H14090234-045	SS-11D Sediment Sieve 1-2mm	09/10/14 11:00	09/12/14	Sediment	Same As Above
H14090234-046	SS-13 Sediment Sieve <0.065mm	09/10/14 9:00	09/12/14	Sediment	Same As Above
H14090234-047	SS-13 Sediment Sieve 0.065-1mm	09/10/14 9:00	09/12/14	Sediment	Same As Above
H14090234-048	SS-13 Sediment Sieve 1-2mm	09/10/14 9:00	09/12/14	Sediment	Same As Above
H14090234-049	SS-14 Sediment Sieve <0.065mm	09/09/14 18:45	09/12/14	Sediment	Same As Above
H14090234-050	SS-14 Sediment Sieve 0.065-1mm	09/09/14 18:45	09/12/14	Sediment	Same As Above
H14090234-051	SS-14 Sediment Sieve 1-2mm	09/09/14 18:45	09/12/14	Sediment	Same As Above
H14090234-052	SS-15A Sediment Sieve <0.065mm	09/09/14 16:30	09/12/14	Sediment	Same As Above
H14090234-053	SS-15A Sediment Sieve 0.065-1mm	09/09/14 16:30	09/12/14	Sediment	Same As Above
H14090234-054	SS-15A Sediment Sieve 1-2mm	09/09/14 16:30	09/12/14	Sediment	Same As Above
H14090234-055	SS-15B Sediment Sieve <0.065mm	09/09/14 15:00	09/12/14	Sediment	Same As Above
H14090234-056	SS-15B Sediment Sieve 0.065-1mm	09/09/14 15:00	09/12/14	Sediment	Same As Above
H14090234-057	SS-15B Sediment Sieve 1-2mm	09/09/14 15:00	09/12/14	Sediment	Same As Above
H14090234-058	SS-16B Sediment Sieve <0.065mm	09/09/14 13:00	09/12/14	Sediment	Same As Above
H14090234-059	SS-16B Sediment Sieve 0.065-1mm	09/09/14 13:00	09/12/14	Sediment	Same As Above
H14090234-060	SS-16B Sediment Sieve 1-2mm	09/09/14 13:00	09/12/14	Sediment	Same As Above
H14090234-061	SS-17D Sediment Sieve <0.065mm	09/09/14 11:00	09/12/14	Sediment	Same As Above
H14090234-062	SS-17D Sediment Sieve 0.065-1mm	09/09/14 11:00	09/12/14	Sediment	Same As Above
H14090234-063	SS-17D Sediment Sieve 1-2mm	09/09/14 11:00	09/12/14	Sediment	Same As Above
H14090234-064	SS-19 Sediment Sieve <0.065mm	09/09/14 9:00	09/12/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14090234-065	SS-19 Sediment Sieve 0.065-1mm	09/09/14 9:00	09/12/14	Sediment	Same As Above
H14090234-066	SS-19 Sediment Sieve 1-2mm	09/09/14 9:00	09/12/14	Sediment	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14090234-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	8	mg/L		1		A2540 D	09/15/14 14:40 / SR		-124 (14410200)_140915A	7	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	96	mg/L		4		A2320 B	09/15/14 18:56 / SR		PHSC_101-H_140915A	106	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 18:56 / SR		PHSC_101-H_140915A	106	R100537
Chloride	27	mg/L		1		E300.0	09/15/14 18:09 / SR		IC102-H_140915A	31	R100569
Sulfate	100	mg/L		1		E300.0	09/15/14 18:09 / SR		IC102-H_140915A	31	R100569
Hardness as CaCO3	189	mg/L		1		A2340 B	09/15/14 12:28 / abb		CALC_140917A	278	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:39 / cm		FIA203-HE_140916A	29	R100588
Nitrogen, Nitrate+Nitrite as N	1.13	mg/L		0.05		E353.2	09/12/14 15:51 / cm		FIA203-HE_140912B	76	R100503
Nitrogen, Total	1.98	mg/L		0.05		A4500 N-C	09/18/14 15:29 / cm	09/18/14 09:39	FIA203-HE_140919A	36	26206
Phosphorus, Total as P	0.046	mg/L		0.005		E365.1	09/15/14 16:03 / cm	09/15/14 14:37	FIA202-HE_140915A	66	26163
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Arsenic	0.004	mg/L		0.001		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Barium	0.051	mg/L		0.003		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:28 / sld		ICP2-HE_140915A	37	R100549
Cadmium	0.00004	mg/L		0.00003		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Calcium	54	mg/L		1		E200.7	09/15/14 12:28 / sld		ICP2-HE_140915A	37	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Copper	0.003	mg/L		0.001		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Iron	0.07	mg/L		0.02		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Magnesium	13	mg/L		1		E200.7	09/15/14 12:28 / sld		ICP2-HE_140915A	37	R100549
Manganese	0.051	mg/L		0.001		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:36 / sbk	09/22/14 10:46	HGCV202-H_140923A	53	26246

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14090234-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Potassium	4	mg/L		1		E200.7	09/15/14 12:28 / sld		ICP2-HE_140915A	37	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 15:21 / dck		ICPMS204-B_140918A	35	R100707
Sodium	23	mg/L		1		E200.7	09/15/14 12:28 / sld		ICP2-HE_140915A	37	R100549
Uranium	0.0044	mg/L		0.0002		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
Zinc	0.013	mg/L		0.008		E200.8	09/18/14 02:53 / dck		ICPMS204-B_140917A	160	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.097	mg/L		0.009		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Barium	0.046	mg/L		0.003		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 13:53 / sld	09/15/14 10:40	ICP2-HE_140916B	45	26146
Cadmium	0.00015	mg/L		0.00003		E200.8	09/22/14 12:45 / dck	09/19/14 08:07	ICPMS204-B_140922A	26	26222
Calcium	56	mg/L		1		E200.7	09/16/14 13:53 / sld	09/15/14 10:40	ICP2-HE_140916B	45	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Copper	0.010	mg/L		0.001		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Iron	0.35	mg/L		0.02		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Lead	0.0032	mg/L		0.0003		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Magnesium	14	mg/L		1		E200.7	09/16/14 13:53 / sld	09/15/14 10:40	ICP2-HE_140916B	45	26146
Manganese	0.084	mg/L		0.001		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Mercury	0.000027	mg/L		5E-06		E245.1	09/23/14 17:49 / sbk	09/22/14 10:46	HGCV202-H_140923A	56	26246
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Potassium	4	mg/L		1		E200.7	09/16/14 13:53 / sld	09/15/14 10:40	ICP2-HE_140916B	45	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 15:47 / dck	09/19/14 08:07	ICPMS204-B_140918A	41	26222

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14090234-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	24	mg/L		1		E200.7	09/16/14 13:53 / sld	09/15/14 10:40	ICP2-HE_140916B	45	26146
Uranium	0.0046	mg/L		0.0002		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146
Zinc	0.029	mg/L		0.008		E200.8	09/18/14 03:19 / dck	09/15/14 10:40	ICPMS204-B_140917A	166	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14090234-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	7	mg/L		1		A2540 D	09/15/14 14:40 / SR		-124 (14410200)_140915A	8	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	98	mg/L		4		A2320 B	09/15/14 19:01 / SR		PHSC_101-H_140915A	108	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 19:01 / SR		PHSC_101-H_140915A	108	R100537
Chloride	29	mg/L		1		E300.0	09/15/14 18:42 / SR		IC102-H_140915A	34	R100569
Sulfate	94	mg/L		1		E300.0	09/15/14 18:42 / SR		IC102-H_140915A	34	R100569
Hardness as CaCO3	181	mg/L		1		A2340 B	09/15/14 12:32 / abb		CALC_140917A	289	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	0.83	mg/L		0.05		E350.1	09/16/14 11:40 / cm		FIA203-HE_140916A	30	R100588
Nitrogen, Nitrate+Nitrite as N	1.68	mg/L		0.05		E353.2	09/12/14 15:52 / cm		FIA203-HE_140912B	77	R100503
Nitrogen, Total	3.38	mg/L	D	0.06		A4500 N-C	09/25/14 13:06 / cm	09/25/14 09:20	FIA203-HE_140925B	13	26265
Phosphorus, Total as P	0.160	mg/L		0.005		E365.1	09/15/14 16:04 / cm	09/15/14 14:37	FIA202-HE_140915A	67	26163
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Arsenic	0.004	mg/L		0.001		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Barium	0.049	mg/L		0.003		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:32 / sld		ICP2-HE_140915A	38	R100549
Cadmium	0.00006	mg/L		0.00003		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Calcium	52	mg/L		1		E200.7	09/15/14 12:32 / sld		ICP2-HE_140915A	38	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Copper	0.005	mg/L		0.001		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Iron	0.07	mg/L		0.02		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Lead	0.0003	mg/L		0.0003		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Magnesium	13	mg/L		1		E200.7	09/15/14 12:32 / sld		ICP2-HE_140915A	38	R100549
Manganese	0.063	mg/L		0.001		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 17:53 / sbk	09/22/14 10:46	HGCV202-H_140923A	57	26246

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14090234-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Potassium	5	mg/L		1		E200.7	09/15/14 12:32 / sld		ICP2-HE_140915A	38	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 15:52 / dck		ICPMS204-B_140918A	42	R100707
Sodium	26	mg/L		1		E200.7	09/15/14 12:32 / sld		ICP2-HE_140915A	38	R100549
Uranium	0.0040	mg/L		0.0002		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
Zinc	0.028	mg/L		0.008		E200.8	09/18/14 03:40 / dck		ICPMS204-B_140917A	171	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.077	mg/L		0.009		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Barium	0.045	mg/L		0.003		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:08 / sld	09/15/14 10:40	ICP2-HE_140916B	49	26146
Cadmium	0.00014	mg/L		0.00003		E200.8	09/22/14 12:50 / dck	09/19/14 08:07	ICPMS204-B_140922A	27	26222
Calcium	53	mg/L		1		E200.7	09/16/14 14:08 / sld	09/15/14 10:40	ICP2-HE_140916B	49	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Copper	0.012	mg/L		0.001		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Iron	0.29	mg/L		0.02		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Lead	0.0026	mg/L		0.0003		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 14:08 / sld	09/15/14 10:40	ICP2-HE_140916B	49	26146
Manganese	0.084	mg/L		0.001		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Mercury	0.000015	mg/L		5E-06		E245.1	09/23/14 17:57 / sbk	09/22/14 10:46	HGCV202-H_140923A	58	26246
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Potassium	5	mg/L		1		E200.7	09/16/14 14:08 / sld	09/15/14 10:40	ICP2-HE_140916B	49	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 15:56 / dck	09/19/14 08:07	ICPMS204-B_140918A	43	26222

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14090234-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	26	mg/L		1		E200.7	09/16/14 14:08 / sld	09/15/14 10:40	ICP2-HE_140916B	49	26146
Uranium	0.0042	mg/L		0.0002		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146
Zinc	0.041	mg/L		0.008		E200.8	09/18/14 03:45 / dck	09/15/14 10:40	ICPMS204-B_140917A	172	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14090234-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	09/15/14 14:41 / SR		-124 (14410200)_140915A	9	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	90	mg/L		4		A2320 B	09/15/14 19:06 / SR		PHSC_101-H_140915A	110	R100537
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/15/14 19:06 / SR		PHSC_101-H_140915A	110	R100537
Chloride	32	mg/L		1		E300.0	09/15/14 18:53 / SR		IC102-H_140915A	35	R100569
Sulfate	86	mg/L		1		E300.0	09/15/14 18:53 / SR		IC102-H_140915A	35	R100569
Hardness as CaCO3	170	mg/L		1		A2340 B	09/15/14 12:36 / abb		CALC_140917A	300	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	0.13	mg/L		0.05		E350.1	09/16/14 11:41 / cm		FIA203-HE_140916A	31	R100588
Nitrogen, Nitrate+Nitrite as N	3.93	mg/L		0.05		E353.2	09/12/14 16:25 / cm		FIA203-HE_140912B	105	R100503
Nitrogen, Total	7.0	mg/L	D	0.3		A4500 N-C	09/25/14 13:08 / cm	09/25/14 09:20	FIA203-HE_140925B	14	26265
Phosphorus, Total as P	0.350	mg/L		0.005		E365.1	09/15/14 16:05 / cm	09/15/14 14:37	FIA202-HE_140915A	68	26163
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Barium	0.043	mg/L		0.003		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:36 / sld		ICP2-HE_140915A	39	R100549
Cadmium	0.00013	mg/L		0.00003		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Calcium	48	mg/L		1		E200.7	09/15/14 12:36 / sld		ICP2-HE_140915A	39	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Copper	0.009	mg/L		0.001		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Iron	0.08	mg/L		0.02		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Lead	0.0005	mg/L		0.0003		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 12:36 / sld		ICP2-HE_140915A	39	R100549
Manganese	0.068	mg/L		0.001		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 18:01 / sbk	09/22/14 10:46	HGCV202-H_140923A	59	26246

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14090234-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 12:36 / sld		ICP2-HE_140915A	39	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 16:00 / dck		ICPMS204-B_140918A	44	R100707
Sodium	30	mg/L		1		E200.7	09/15/14 12:36 / sld		ICP2-HE_140915A	39	R100549
Uranium	0.0038	mg/L		0.0002		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
Zinc	0.051	mg/L		0.008		E200.8	09/18/14 03:49 / dck		ICPMS204-B_140917A	173	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.113	mg/L		0.009		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Arsenic	0.006	mg/L		0.001		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Barium	0.039	mg/L		0.003		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:12 / sld	09/15/14 10:40	ICP2-HE_140916B	50	26146
Cadmium	0.00025	mg/L		0.00003		E200.8	09/22/14 13:11 / dck	09/19/14 08:07	ICPMS204-B_140922A	32	26222
Calcium	50	mg/L		1		E200.7	09/16/14 14:12 / sld	09/15/14 10:40	ICP2-HE_140916B	50	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Copper	0.017	mg/L		0.001		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Iron	0.33	mg/L		0.02		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Lead	0.0029	mg/L		0.0003		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 14:12 / sld	09/15/14 10:40	ICP2-HE_140916B	50	26146
Manganese	0.093	mg/L		0.001		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Mercury	0.000025	mg/L		5E-06		E245.1	09/23/14 18:06 / sbk	09/22/14 10:46	HGCV202-H_140923A	60	26246
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Potassium	6	mg/L		1		E200.7	09/16/14 14:12 / sld	09/15/14 10:40	ICP2-HE_140916B	50	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 16:05 / dck	09/19/14 08:07	ICPMS204-B_140918A	45	26222

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14090234-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.7	09/16/14 14:12 / sld	09/15/14 10:40	ICP2-HE_140916B	50	26146
Uranium	0.0042	mg/L		0.0002		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146
Zinc	0.064	mg/L		0.008		E200.8	09/18/14 03:54 / dck	09/15/14 10:40	ICPMS204-B_140917A	174	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Duplicate #2 (SS-08)
Lab ID: H14090234-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	09/15/14 14:41 / SR		I24 (14410200)_140915A	10	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	90	mg/L		4		A2320 B	09/15/14 19:11 / SR		PHSC_101-H_140915A	112	R100537
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/15/14 19:11 / SR		PHSC_101-H_140915A	112	R100537
Chloride	32	mg/L		1		E300.0	09/15/14 19:04 / SR		IC102-H_140915A	36	R100569
Sulfate	85	mg/L		1		E300.0	09/15/14 19:04 / SR		IC102-H_140915A	36	R100569
Hardness as CaCO3	170	mg/L		1		A2340 B	09/15/14 12:40 / abb		CALC_140917A	311	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	0.13	mg/L		0.05		E350.1	09/16/14 11:42 / cm		FIA203-HE_140916A	32	R100588
Nitrogen, Nitrate+Nitrite as N	3.86	mg/L		0.05		E353.2	09/12/14 16:27 / cm		FIA203-HE_140912B	106	R100503
Nitrogen, Total	5.1	mg/L	D	0.2		A4500 N-C	09/24/14 10:18 / cm	09/23/14 07:38	FIA203-HE_140924A	16	26263
Phosphorus, Total as P	0.310	mg/L		0.005		E365.1	09/16/14 13:35 / cm	09/15/14 14:40	FIA202-HE_140916A	13	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Barium	0.045	mg/L		0.003		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:40 / sld		ICP2-HE_140915A	40	R100549
Cadmium	0.00013	mg/L		0.00003		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Calcium	48	mg/L		1		E200.7	09/15/14 12:40 / sld		ICP2-HE_140915A	40	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Copper	0.009	mg/L		0.001		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Iron	0.08	mg/L		0.02		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Lead	0.0005	mg/L		0.0003		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 12:40 / sld		ICP2-HE_140915A	40	R100549
Manganese	0.068	mg/L		0.001		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 18:10 / sbk	09/22/14 10:46	HGCV202-H_140923A	61	26246

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Duplicate #2 (SS-08)
Lab ID: H14090234-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 12:40 / sld		ICP2-HE_140915A	40	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 16:09 / dck		ICPMS204-B_140918A	46	R100707
Sodium	30	mg/L		1		E200.7	09/15/14 12:40 / sld		ICP2-HE_140915A	40	R100549
Uranium	0.0038	mg/L		0.0002		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
Zinc	0.054	mg/L		0.008		E200.8	09/18/14 03:58 / dck		ICPMS204-B_140917A	175	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.120	mg/L		0.009		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Arsenic	0.006	mg/L		0.001		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Barium	0.039	mg/L		0.003		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:15 / sld	09/15/14 10:40	ICP2-HE_140916B	51	26146
Cadmium	0.00025	mg/L		0.00003		E200.8	09/22/14 13:15 / dck	09/19/14 08:07	ICPMS204-B_140922A	33	26222
Calcium	50	mg/L		1		E200.7	09/16/14 14:15 / sld	09/15/14 10:40	ICP2-HE_140916B	51	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Copper	0.017	mg/L		0.001		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Iron	0.34	mg/L		0.02		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Lead	0.0029	mg/L		0.0003		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 14:15 / sld	09/15/14 10:40	ICP2-HE_140916B	51	26146
Manganese	0.094	mg/L		0.001		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Mercury	0.000016	mg/L		5E-06		E245.1	09/23/14 18:29 / sbk	09/22/14 10:46	HGCV202-H_140923A	64	26246
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Potassium	6	mg/L		1		E200.7	09/16/14 14:15 / sld	09/15/14 10:40	ICP2-HE_140916B	51	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 16:13 / dck	09/19/14 08:07	ICPMS204-B_140918A	47	26222

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Duplicate #2 (SS-08)
Lab ID: H14090234-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.7	09/16/14 14:15 / sld	09/15/14 10:40	ICP2-HE_140916B	51	26146
Uranium	0.0041	mg/L		0.0002		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146
Zinc	0.065	mg/L		0.008		E200.8	09/18/14 04:02 / dck	09/15/14 10:40	ICPMS204-B_140917A	176	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #2
Lab ID: H14090234-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 17:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	09/15/14 14:41 / SR		I24 (14410200)_140915A	11	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	09/15/14 19:16 / SR		PHSC_101-H_140915A	114	R100537
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	09/15/14 19:16 / SR		PHSC_101-H_140915A	114	R100537
Chloride	ND	mg/L		1		E300.0	09/15/14 19:15 / SR		IC102-H_140915A	37	R100569
Sulfate	ND	mg/L		1		E300.0	09/15/14 19:15 / SR		IC102-H_140915A	37	R100569
Hardness as CaCO3	ND	mg/L		1		A2340 B	09/15/14 12:43 / abb		CALC_140917A	322	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:43 / cm		FIA203-HE_140916A	33	R100588
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	09/12/14 15:56 / cm		FIA203-HE_140912B	80	R100503
Nitrogen, Total	ND	mg/L	H	0.05		A4500 N-C	10/14/14 10:05 / cm	10/13/14 10:52	FIA203-HE_141014A	19	26523
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	09/16/14 13:36 / cm	09/15/14 14:40	FIA202-HE_140916A	14	26164
-TN was re-analyzed to confirm result. The re-analysis is reported.											
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Arsenic	ND	mg/L		0.001		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Barium	0.004	mg/L		0.003		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:43 / sld		ICP2-HE_140915A	41	R100549
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Calcium	ND	mg/L		1		E200.7	09/15/14 12:43 / sld		ICP2-HE_140915A	41	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Copper	ND	mg/L		0.001		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Iron	ND	mg/L		0.02		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Magnesium	ND	mg/L		1		E200.7	09/15/14 12:43 / sld		ICP2-HE_140915A	41	R100549
Manganese	ND	mg/L		0.001		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637

Report Definitions:
RL - Analyte reporting limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #2
Lab ID: H14090234-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 17:30 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 18:34 / sbk	09/22/14 10:46	HGCV202-H_140923A	65	26246
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Potassium	ND	mg/L		1		E200.7	09/15/14 12:43 / sld		ICP2-HE_140915A	41	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Sodium	ND	mg/L		1		E200.7	09/15/14 12:43 / sld		ICP2-HE_140915A	41	R100549
Uranium	ND	mg/L		0.0002		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
Zinc	0.013	mg/L		0.008		E200.8	09/18/14 04:20 / dck		ICPMS204-B_140917A	180	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Arsenic	ND	mg/L		0.001		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Barium	ND	mg/L		0.003		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:19 / sld	09/15/14 10:40	ICP2-HE_140916B	52	26146
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Calcium	ND	mg/L		1		E200.7	09/16/14 14:19 / sld	09/15/14 10:40	ICP2-HE_140916B	52	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Copper	ND	mg/L		0.001		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Iron	ND	mg/L		0.02		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Lead	ND	mg/L		0.0003		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Magnesium	ND	mg/L		1		E200.7	09/16/14 14:19 / sld	09/15/14 10:40	ICP2-HE_140916B	52	26146
Manganese	ND	mg/L		0.001		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 18:46 / sbk	09/22/14 10:46	HGCV202-H_140923A	68	26246
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Potassium	ND	mg/L		1		E200.7	09/16/14 14:19 / sld	09/15/14 10:40	ICP2-HE_140916B	52	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #2
Lab ID: H14090234-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 17:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Silver	ND	mg/L		0.0002		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Sodium	ND	mg/L		1		E200.7	09/16/14 14:19 / sld	09/15/14 10:40	ICP2-HE_140916B	52	26146
Uranium	ND	mg/L		0.0002		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146
Zinc	ND	mg/L		0.008		E200.8	09/18/14 04:25 / dck	09/15/14 10:40	ICPMS204-B_140917A	181	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14090234-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	09/15/14 14:41 / SR		I24 (14410200)_140915A	12	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	94	mg/L		4		A2320 B	09/15/14 19:22 / SR		PHSC_101-H_140915A	116	R100537
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/15/14 19:22 / SR		PHSC_101-H_140915A	116	R100537
Chloride	32	mg/L		1		E300.0	09/15/14 19:26 / SR		IC102-H_140915A	38	R100569
Sulfate	96	mg/L		1		E300.0	09/15/14 19:26 / SR		IC102-H_140915A	38	R100569
Hardness as CaCO3	180	mg/L		1		A2340 B	09/15/14 12:47 / abb		CALC_140917A	333	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:45 / cm		FIA203-HE_140916A	34	R100588
Nitrogen, Nitrate+Nitrite as N	2.94	mg/L		0.05		E353.2	09/12/14 16:28 / cm		FIA203-HE_140912B	107	R100503
Nitrogen, Total	3.1	mg/L	D	0.2		A4500 N-C	09/24/14 10:19 / cm	09/23/14 07:38	FIA203-HE_140924A	17	26263
Phosphorus, Total as P	0.269	mg/L		0.005		E365.1	09/16/14 13:39 / cm	09/15/14 14:40	FIA202-HE_140916A	17	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Barium	0.039	mg/L		0.003		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:47 / sld		ICP2-HE_140915A	42	R100549
Cadmium	0.00013	mg/L		0.00003		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Calcium	51	mg/L		1		E200.7	09/15/14 12:47 / sld		ICP2-HE_140915A	42	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Copper	0.015	mg/L		0.001		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Iron	0.05	mg/L		0.02		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Magnesium	13	mg/L		1		E200.7	09/15/14 12:47 / sld		ICP2-HE_140915A	42	R100549
Manganese	0.035	mg/L		0.001		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/23/14 18:51 / sbk	09/22/14 10:46	HGCV202-H_140923A	69	26246

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14090234-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Potassium	5	mg/L		1		E200.7	09/15/14 12:47 / sld		ICP2-HE_140915A	42	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Sodium	31	mg/L		1		E200.7	09/15/14 12:47 / sld		ICP2-HE_140915A	42	R100549
Uranium	0.0048	mg/L		0.0002		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
Zinc	0.027	mg/L		0.008		E200.8	09/18/14 04:29 / dck		ICPMS204-B_140917A	182	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.052	mg/L		0.009		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Antimony	0.0005	mg/L		0.0005		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Arsenic	0.006	mg/L		0.001		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Barium	0.035	mg/L		0.003		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:23 / sld	09/15/14 10:40	ICP2-HE_140916B	53	26146
Cadmium	0.00025	mg/L		0.00003		E200.8	09/22/14 13:33 / dck	09/19/14 08:07	ICPMS204-B_140922A	37	26222
Calcium	53	mg/L		1		E200.7	09/16/14 14:23 / sld	09/15/14 10:40	ICP2-HE_140916B	53	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Copper	0.022	mg/L		0.001		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Iron	0.18	mg/L		0.02		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Lead	0.0014	mg/L		0.0003		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 14:23 / sld	09/15/14 10:40	ICP2-HE_140916B	53	26146
Manganese	0.054	mg/L		0.001		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Mercury	0.000014	mg/L		5E-06		E245.1	09/24/14 14:01 / rgk	09/23/14 12:03	HGCV202-H_140924A	41	26288
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Potassium	5	mg/L		1		E200.7	09/16/14 14:23 / sld	09/15/14 10:40	ICP2-HE_140916B	53	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Silver	0.0002	mg/L		0.0002		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14090234-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.7	09/16/14 14:23 / sld	09/15/14 10:40	ICP2-HE_140916B	53	26146
Uranium	0.0051	mg/L		0.0002		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146
Zinc	0.038	mg/L		0.008		E200.8	09/18/14 04:47 / dck	09/15/14 10:40	ICPMS204-B_140917A	186	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14090234-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	5	mg/L		1		A2540 D	09/15/14 14:42 / SR		I24 (14410200)_140915A	13	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	94	mg/L		4		A2320 B	09/15/14 19:28 / SR		PHSC_101-H_140915A	118	R100537
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/15/14 19:28 / SR		PHSC_101-H_140915A	118	R100537
Chloride	32	mg/L		1		E300.0	09/15/14 19:37 / SR		IC102-H_140915A	39	R100569
Sulfate	95	mg/L		1		E300.0	09/15/14 19:37 / SR		IC102-H_140915A	39	R100569
Hardness as CaCO3	175	mg/L		1		A2340 B	09/15/14 12:58 / abb		CALC_140917A	344	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:46 / cm		FIA203-HE_140916A	35	R100588
Nitrogen, Nitrate+Nitrite as N	2.92	mg/L		0.05		E353.2	09/12/14 16:29 / cm		FIA203-HE_140912B	108	R100503
Nitrogen, Total	3.56	mg/L	D	0.06		A4500 N-C	09/24/14 10:20 / cm	09/23/14 07:38	FIA203-HE_140924A	18	26263
Phosphorus, Total as P	0.283	mg/L		0.005		E365.1	09/16/14 13:40 / cm	09/15/14 14:40	FIA202-HE_140916A	18	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Arsenic	0.005	mg/L		0.001		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Barium	0.040	mg/L		0.003		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 12:58 / sld		ICP2-HE_140915A	45	R100549
Cadmium	0.00016	mg/L		0.00003		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Calcium	50	mg/L		1		E200.7	09/15/14 12:58 / sld		ICP2-HE_140915A	45	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Copper	0.016	mg/L		0.001		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Iron	0.05	mg/L		0.02		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 12:58 / sld		ICP2-HE_140915A	45	R100549
Manganese	0.040	mg/L		0.001		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/24/14 14:05 / rgk	09/23/14 12:03	HGCV202-H_140924A	42	26288

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14090234-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Potassium	5	mg/L		1		E200.7	09/15/14 12:58 / sld		ICP2-HE_140915A	45	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Sodium	31	mg/L		1		E200.7	09/15/14 12:58 / sld		ICP2-HE_140915A	45	R100549
Uranium	0.0047	mg/L		0.0002		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
Zinc	0.035	mg/L		0.008		E200.8	09/18/14 04:51 / dck		ICPMS204-B_140917A	187	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.027	mg/L		0.009		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Arsenic	0.006	mg/L		0.001		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Barium	0.037	mg/L		0.003		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:27 / sld	09/15/14 10:40	ICP2-HE_140916B	54	26146
Cadmium	0.00024	mg/L		0.00003		E200.8	09/22/14 13:37 / dck	09/19/14 08:07	ICPMS204-B_140922A	38	26222
Calcium	52	mg/L		1		E200.7	09/16/14 14:27 / sld	09/15/14 10:40	ICP2-HE_140916B	54	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Copper	0.023	mg/L		0.001		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Iron	0.16	mg/L		0.02		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Lead	0.0014	mg/L		0.0003		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 14:27 / sld	09/15/14 10:40	ICP2-HE_140916B	54	26146
Manganese	0.065	mg/L		0.001		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Mercury	0.000014	mg/L		5E-06		E245.1	09/24/14 14:09 / rgk	09/23/14 12:03	HGCV202-H_140924A	43	26288
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Potassium	6	mg/L		1		E200.7	09/16/14 14:27 / sld	09/15/14 10:40	ICP2-HE_140916B	54	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14090234-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	31	mg/L		1		E200.7	09/16/14 14:27 / sld	09/15/14 10:40	ICP2-HE_140916B	54	26146
Uranium	0.0049	mg/L		0.0002		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146
Zinc	0.047	mg/L		0.008		E200.8	09/18/14 04:56 / dck	09/15/14 10:40	ICPMS204-B_140917A	188	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14090234-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	09/15/14 14:43 / SR		I24 (14410200)_140915A	16	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	98	mg/L		4		A2320 B	09/15/14 19:33 / SR		PHSC_101-H_140915A	120	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 19:33 / SR		PHSC_101-H_140915A	120	R100537
Chloride	53	mg/L		1		E300.0	09/15/14 19:49 / SR		IC102-H_140915A	40	R100569
Sulfate	100	mg/L		1		E300.0	09/15/14 19:49 / SR		IC102-H_140915A	40	R100569
Hardness as CaCO3	196	mg/L		1		A2340 B	09/15/14 13:02 / abb		CALC_140917A	355	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:47 / cm		FIA203-HE_140916A	36	R100588
Nitrogen, Nitrate+Nitrite as N	2.93	mg/L		0.05		E353.2	09/12/14 16:30 / cm		FIA203-HE_140912B	109	R100503
Nitrogen, Total	3.73	mg/L	D	0.06		A4500 N-C	09/24/14 10:22 / cm	09/23/14 07:38	FIA203-HE_140924A	19	26263
Phosphorus, Total as P	0.287	mg/L		0.005		E365.1	09/16/14 13:41 / cm	09/15/14 14:40	FIA202-HE_140916A	19	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Arsenic	0.006	mg/L		0.001		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Barium	0.046	mg/L		0.003		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:02 / sld		ICP2-HE_140915A	46	R100549
Cadmium	0.00018	mg/L		0.00003		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Calcium	58	mg/L		1		E200.7	09/15/14 13:02 / sld		ICP2-HE_140915A	46	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Copper	0.015	mg/L		0.001		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Iron	0.03	mg/L		0.02		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Magnesium	13	mg/L		1		E200.7	09/15/14 13:02 / sld		ICP2-HE_140915A	46	R100549
Manganese	0.075	mg/L		0.001		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Mercury	5.4E-06	mg/L		5E-06		E245.1	09/24/14 14:13 / rgk	09/23/14 12:03	HGCV202-H_140924A	44	26288

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14090234-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 13:02 / sld		ICP2-HE_140915A	46	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Sodium	36	mg/L		1		E200.7	09/15/14 13:02 / sld		ICP2-HE_140915A	46	R100549
Uranium	0.0043	mg/L		0.0002		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
Zinc	0.050	mg/L		0.008		E200.8	09/18/14 05:00 / dck		ICPMS204-B_140917A	189	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.079	mg/L		0.009		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Barium	0.044	mg/L		0.003		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:38 / sld	09/15/14 10:40	ICP2-HE_140916B	57	26146
Cadmium	0.00027	mg/L		0.00003		E200.8	09/22/14 13:42 / dck	09/19/14 08:07	ICPMS204-B_140922A	39	26222
Calcium	61	mg/L		1		E200.7	09/16/14 14:38 / sld	09/15/14 10:40	ICP2-HE_140916B	57	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Copper	0.023	mg/L		0.001		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Iron	0.18	mg/L		0.02		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Lead	0.0012	mg/L		0.0003		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 14:38 / sld	09/15/14 10:40	ICP2-HE_140916B	57	26146
Manganese	0.102	mg/L		0.001		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Mercury	0.000012	mg/L		5E-06		E245.1	09/24/14 14:18 / rgk	09/23/14 12:03	HGCV202-H_140924A	45	26288
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Potassium	7	mg/L		1		E200.7	09/16/14 14:38 / sld	09/15/14 10:40	ICP2-HE_140916B	57	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14090234-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	37	mg/L		1		E200.7	09/16/14 14:38 / sld	09/15/14 10:40	ICP2-HE_140916B	57	26146
Uranium	0.0045	mg/L		0.0002		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146
Zinc	0.070	mg/L		0.008		E200.8	09/18/14 05:05 / dck	09/15/14 10:40	ICPMS204-B_140917A	190	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14090234-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	5	mg/L		1		A2540 D	09/15/14 14:43 / SR		I24 (14410200)_140915A	17	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 19:38 / SR		PHSC_101-H_140915A	122	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 19:38 / SR		PHSC_101-H_140915A	122	R100537
Chloride	52	mg/L		1		E300.0	09/15/14 20:00 / SR		IC102-H_140915A	41	R100569
Sulfate	99	mg/L		1		E300.0	09/15/14 20:00 / SR		IC102-H_140915A	41	R100569
Hardness as CaCO3	193	mg/L		1		A2340 B	09/15/14 13:17 / abb		CALC_140917A	366	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 11:57 / cm		FIA203-HE_140916A	44	R100588
Nitrogen, Nitrate+Nitrite as N	2.71	mg/L		0.05		E353.2	09/12/14 16:34 / cm		FIA203-HE_140912B	112	R100503
Nitrogen, Total	3.51	mg/L	D	0.06		A4500 N-C	09/24/14 10:23 / cm	09/23/14 07:38	FIA203-HE_140924A	20	26263
Phosphorus, Total as P	0.289	mg/L		0.005		E365.1	09/16/14 13:42 / cm	09/15/14 14:40	FIA202-HE_140916A	20	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Barium	0.049	mg/L		0.003		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:17 / sld		ICP2-HE_140915A	50	R100549
Cadmium	0.00020	mg/L		0.00003		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Calcium	57	mg/L		1		E200.7	09/15/14 13:17 / sld		ICP2-HE_140915A	50	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Copper	0.014	mg/L		0.001		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Iron	0.03	mg/L		0.02		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 13:17 / sld		ICP2-HE_140915A	50	R100549
Manganese	0.085	mg/L		0.001		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Mercury	5.7E-06	mg/L		5E-06		E245.1	09/24/14 14:22 / rgk	09/23/14 12:03	HGCV202-H_140924A	46	26288

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14090234-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Potassium	7	mg/L		1		E200.7	09/15/14 13:17 / sld		ICP2-HE_140915A	50	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Sodium	36	mg/L		1		E200.7	09/15/14 13:17 / sld		ICP2-HE_140915A	50	R100549
Uranium	0.0040	mg/L		0.0002		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
Zinc	0.077	mg/L		0.008		E200.8	09/18/14 05:23 / dck		ICPMS204-B_140917A	194	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.060	mg/L		0.009		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Arsenic	0.008	mg/L		0.001		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Barium	0.046	mg/L		0.003		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:42 / sld	09/15/14 10:40	ICP2-HE_140916B	58	26146
Cadmium	0.00031	mg/L		0.00003		E200.8	09/22/14 13:46 / dck	09/19/14 08:07	ICPMS204-B_140922A	40	26222
Calcium	60	mg/L		1		E200.7	09/16/14 14:42 / sld	09/15/14 10:40	ICP2-HE_140916B	58	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Copper	0.022	mg/L		0.001		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Iron	0.16	mg/L		0.02		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Lead	0.0011	mg/L		0.0003		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 14:42 / sld	09/15/14 10:40	ICP2-HE_140916B	58	26146
Manganese	0.114	mg/L		0.001		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Mercury	0.000013	mg/L		5E-06		E245.1	09/24/14 14:26 / rgk	09/23/14 12:03	HGCV202-H_140924A	47	26288
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Potassium	7	mg/L		1		E200.7	09/16/14 14:42 / sld	09/15/14 10:40	ICP2-HE_140916B	58	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14090234-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	37	mg/L		1		E200.7	09/16/14 14:42 / sld	09/15/14 10:40	ICP2-HE_140916B	58	26146
Uranium	0.0044	mg/L		0.0002		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146
Zinc	0.095	mg/L		0.008		E200.8	09/18/14 05:27 / dck	09/15/14 10:40	ICPMS204-B_140917A	195	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14090234-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	5	mg/L		1		A2540 D	09/15/14 14:43 / SR		I24 (14410200)_140915A	18	TSS140915A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 19:43 / SR		PHSC_101-H_140915A	124	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 19:43 / SR		PHSC_101-H_140915A	124	R100537
Chloride	51	mg/L		1		E300.0	09/15/14 20:11 / SR		IC102-H_140915A	42	R100569
Sulfate	97	mg/L		1		E300.0	09/15/14 20:11 / SR		IC102-H_140915A	42	R100569
Hardness as CaCO3	194	mg/L		1		A2340 B	09/15/14 13:21 / abb		CALC_140917A	377	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:19 / cm		FIA203-HE_140916B	11	R100599
Nitrogen, Nitrate+Nitrite as N	2.76	mg/L		0.05		E353.2	09/12/14 16:37 / cm		FIA203-HE_140912B	115	R100503
Nitrogen, Total	3.51	mg/L	D	0.06		A4500 N-C	09/24/14 10:24 / cm	09/23/14 07:38	FIA203-HE_140924A	21	26263
Phosphorus, Total as P	0.288	mg/L		0.005		E365.1	09/16/14 13:43 / cm	09/15/14 14:40	FIA202-HE_140916A	21	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Barium	0.053	mg/L		0.003		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:21 / sld		ICP2-HE_140915A	51	R100549
Cadmium	0.00020	mg/L		0.00003		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Calcium	57	mg/L		1		E200.7	09/15/14 13:21 / sld		ICP2-HE_140915A	51	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Copper	0.014	mg/L		0.001		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Iron	0.03	mg/L		0.02		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Magnesium	13	mg/L		1		E200.7	09/15/14 13:21 / sld		ICP2-HE_140915A	51	R100549
Manganese	0.088	mg/L		0.001		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Mercury	5.6E-06	mg/L		5E-06		E245.1	09/24/14 14:47 / rgk	09/23/14 12:03	HGCV202-H_140924A	52	26288

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14090234-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Potassium	7	mg/L		1		E200.7	09/15/14 13:21 / sld		ICP2-HE_140915A	51	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Sodium	36	mg/L		1		E200.7	09/15/14 13:21 / sld		ICP2-HE_140915A	51	R100549
Uranium	0.0038	mg/L		0.0002		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
Zinc	0.101	mg/L		0.008		E200.8	09/18/14 05:31 / dck		ICPMS204-B_140917A	196	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.089	mg/L		0.009		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Barium	0.048	mg/L		0.003		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:45 / sld	09/15/14 10:40	ICP2-HE_140916B	59	26146
Cadmium	0.00028	mg/L		0.00003		E200.8	09/22/14 13:50 / dck	09/19/14 08:07	ICPMS204-B_140922A	41	26222
Calcium	59	mg/L		1		E200.7	09/16/14 14:45 / sld	09/15/14 10:40	ICP2-HE_140916B	59	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Copper	0.020	mg/L		0.001		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Iron	0.18	mg/L		0.02		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Lead	0.0011	mg/L		0.0003		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 14:45 / sld	09/15/14 10:40	ICP2-HE_140916B	59	26146
Manganese	0.127	mg/L		0.001		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Mercury	0.000011	mg/L		5E-06		E245.1	09/24/14 14:51 / rgk	09/23/14 12:03	HGCV202-H_140924A	53	26288
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Potassium	7	mg/L		1		E200.7	09/16/14 14:45 / sld	09/15/14 10:40	ICP2-HE_140916B	59	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14090234-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	37	mg/L		1		E200.7	09/16/14 14:45 / sld	09/15/14 10:40	ICP2-HE_140916B	59	26146
Uranium	0.0040	mg/L		0.0002		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146
Zinc	0.112	mg/L		0.008		E200.8	09/18/14 05:36 / dck	09/15/14 10:40	ICPMS204-B_140917A	197	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14090234-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	09/12/14 14:37 / cm		I24 (14410200)_140912A	44	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	96	mg/L		4		A2320 B	09/15/14 19:49 / SR		PHSC_101-H_140915A	126	R100537
Bicarbonate as HCO3	95	mg/L		4		A2320 B	09/15/14 19:49 / SR		PHSC_101-H_140915A	126	R100537
Chloride	51	mg/L		1		E300.0	09/15/14 20:44 / SR		IC102-H_140915A	45	R100569
Sulfate	100	mg/L		1		E300.0	09/15/14 20:44 / SR		IC102-H_140915A	45	R100569
Hardness as CaCO3	190	mg/L		1		A2340 B	09/15/14 13:24 / abb		CALC_140917A	388	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:23 / cm		FIA203-HE_140916B	14	R100599
Nitrogen, Nitrate+Nitrite as N	2.06	mg/L		0.05		E353.2	09/12/14 16:39 / cm		FIA203-HE_140912B	116	R100503
Nitrogen, Total	2.76	mg/L	D	0.06		A4500 N-C	09/24/14 10:25 / cm	09/23/14 07:38	FIA203-HE_140924A	22	26263
Phosphorus, Total as P	0.249	mg/L		0.005		E365.1	09/16/14 13:44 / cm	09/15/14 14:40	FIA202-HE_140916A	22	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Arsenic	0.008	mg/L		0.001		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Barium	0.038	mg/L		0.003		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:24 / sld		ICP2-HE_140915A	52	R100549
Cadmium	0.00015	mg/L		0.00003		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Calcium	56	mg/L		1		E200.7	09/15/14 13:24 / sld		ICP2-HE_140915A	52	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Copper	0.013	mg/L		0.001		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Iron	0.04	mg/L		0.02		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 13:24 / sld		ICP2-HE_140915A	52	R100549
Manganese	0.045	mg/L		0.001		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Mercury	5.6E-06	mg/L		5E-06		E245.1	09/24/14 14:56 / rgk	09/23/14 12:03	HGCV202-H_140924A	54	26288

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14090234-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 13:24 / sld		ICP2-HE_140915A	52	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Sodium	37	mg/L		1		E200.7	09/15/14 13:24 / sld		ICP2-HE_140915A	52	R100549
Uranium	0.0052	mg/L		0.0002		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
Zinc	0.018	mg/L		0.008		E200.8	09/18/14 05:40 / dck		ICPMS204-B_140917A	198	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.087	mg/L		0.009		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Antimony	ND	mg/L		0.0005		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Arsenic	0.008	mg/L		0.001		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Barium	0.033	mg/L		0.003		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 14:49 / sld	09/15/14 10:40	ICP2-HE_140916B	60	26146
Cadmium	0.00023	mg/L		0.00003		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Calcium	58	mg/L		1		E200.7	09/16/14 14:49 / sld	09/15/14 10:40	ICP2-HE_140916B	60	26146
Chromium	ND	mg/L		0.01		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Cobalt	ND	mg/L		0.01		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Copper	0.018	mg/L		0.001		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Iron	0.19	mg/L		0.02		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Lead	0.0011	mg/L		0.0003		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 14:49 / sld	09/15/14 10:40	ICP2-HE_140916B	60	26146
Manganese	0.081	mg/L		0.001		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Mercury	0.000012	mg/L		5E-06		E245.1	09/24/14 15:00 / rgk	09/23/14 12:03	HGCV202-H_140924A	55	26288
Molybdenum	0.006	mg/L		0.005		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Nickel	ND	mg/L		0.002		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Potassium	6	mg/L		1		E200.7	09/16/14 14:49 / sld	09/15/14 10:40	ICP2-HE_140916B	60	26146
Selenium	ND	mg/L		0.001		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Silver	ND	mg/L		0.0002		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14090234-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	37	mg/L		1		E200.7	09/16/14 14:49 / sld	09/15/14 10:40	ICP2-HE_140916B	60	26146
Uranium	0.0055	mg/L		0.0002		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Vanadium	ND	mg/L		0.1		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146
Zinc	0.033	mg/L		0.008		E200.8	09/17/14 19:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	100	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Duplicate #1
Lab ID: H14090234-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	09/12/14 14:38 / cm		I24 (14410200)_140912A	45	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	96	mg/L		4		A2320 B	09/15/14 19:55 / SR		PHSC_101-H_140915A	128	R100537
Bicarbonate as HCO3	95	mg/L		4		A2320 B	09/15/14 19:55 / SR		PHSC_101-H_140915A	128	R100537
Chloride	52	mg/L		1		E300.0	09/15/14 21:17 / SR		IC102-H_140915A	48	R100569
Sulfate	100	mg/L		1		E300.0	09/15/14 21:17 / SR		IC102-H_140915A	48	R100569
Hardness as CaCO3	189	mg/L		1		A2340 B	09/15/14 13:28 / abb		CALC_140917A	399	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:24 / cm		FIA203-HE_140916B	15	R100599
Nitrogen, Nitrate+Nitrite as N	2.12	mg/L		0.05		E353.2	09/12/14 16:40 / cm		FIA203-HE_140912B	117	R100503
Nitrogen, Total	2.79	mg/L	D	0.06		A4500 N-C	09/24/14 10:26 / cm	09/23/14 07:38	FIA203-HE_140924A	23	26263
Phosphorus, Total as P	0.251	mg/L		0.005		E365.1	09/16/14 13:45 / cm	09/15/14 14:40	FIA202-HE_140916A	23	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Arsenic	0.008	mg/L		0.001		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Barium	0.036	mg/L		0.003		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:28 / sld		ICP2-HE_140915A	53	R100549
Cadmium	0.00017	mg/L		0.00003		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Calcium	55	mg/L		1		E200.7	09/15/14 13:28 / sld		ICP2-HE_140915A	53	R100549
Chromium	ND	mg/L		0.01		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Copper	0.013	mg/L		0.001		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Iron	0.04	mg/L		0.02		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Lead	0.0003	mg/L		0.0003		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 13:28 / sld		ICP2-HE_140915A	53	R100549
Manganese	0.045	mg/L		0.001		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Mercury	5.5E-06	mg/L		5E-06		E245.1	09/24/14 15:04 / rgk	09/23/14 12:03	HGCV202-H_140924A	56	26288

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Duplicate #1
Lab ID: H14090234-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Nickel	ND	mg/L		0.002		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 13:28 / sld		ICP2-HE_140915A	53	R100549
Selenium	ND	mg/L		0.001		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Silver	ND	mg/L		0.0002		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Sodium	37	mg/L		1		E200.7	09/15/14 13:28 / sld		ICP2-HE_140915A	53	R100549
Uranium	0.0054	mg/L		0.0002		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
Zinc	0.018	mg/L		0.008		E200.8	09/17/14 19:31 / dck		ICPMS204-B_140917A	98	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.083	mg/L		0.009		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Arsenic	0.008	mg/L		0.001		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Barium	0.033	mg/L		0.003		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:04 / sld	09/15/14 10:40	ICP2-HE_140916B	64	26146
Cadmium	0.00023	mg/L		0.00003		E200.8	09/22/14 13:55 / dck	09/19/14 08:07	ICPMS204-B_140922A	42	26222
Calcium	59	mg/L		1		E200.7	09/16/14 15:04 / sld	09/15/14 10:40	ICP2-HE_140916B	64	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Copper	0.018	mg/L		0.001		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Iron	0.19	mg/L		0.02		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Lead	0.0011	mg/L		0.0003		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 15:04 / sld	09/15/14 10:40	ICP2-HE_140916B	64	26146
Manganese	0.082	mg/L		0.001		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Mercury	0.000011	mg/L		5E-06		E245.1	09/24/14 15:08 / rgk	09/23/14 12:03	HGCV202-H_140924A	57	26288
Molybdenum	0.006	mg/L		0.005		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Potassium	6	mg/L		1		E200.7	09/16/14 15:04 / sld	09/15/14 10:40	ICP2-HE_140916B	64	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Duplicate #1
Lab ID: H14090234-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	37	mg/L		1		E200.7	09/16/14 15:04 / sld	09/15/14 10:40	ICP2-HE_140916B	64	26146
Uranium	0.0055	mg/L		0.0002		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146
Zinc	0.034	mg/L		0.008		E200.8	09/18/14 06:12 / dck	09/15/14 10:40	ICPMS204-B_140917A	205	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14090234-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 20:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	09/12/14 14:39 / cm		I24 (14410200)_140912A	46	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	09/15/14 20:01 / SR		PHSC_101-H_140915A	130	R100537
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	09/15/14 20:01 / SR		PHSC_101-H_140915A	130	R100537
Chloride	ND	mg/L		1		E300.0	09/15/14 21:29 / SR		IC102-H_140915A	49	R100569
Sulfate	ND	mg/L		1		E300.0	09/15/14 21:29 / SR		IC102-H_140915A	49	R100569
Hardness as CaCO3	ND	mg/L		1		A2340 B	09/15/14 13:32 / abb		CALC_140917A	410	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:25 / cm		FIA203-HE_140916B	16	R100599
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	09/12/14 16:08 / cm		FIA203-HE_140912B	90	R100503
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	09/24/14 10:28 / cm	09/23/14 07:38	FIA203-HE_140924A	24	26263
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	09/16/14 13:46 / cm	09/15/14 14:40	FIA202-HE_140916A	24	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Arsenic	ND	mg/L		0.001		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Barium	0.004	mg/L		0.003		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:32 / sld		ICP2-HE_140915A	54	R100549
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Calcium	ND	mg/L		1		E200.7	09/15/14 13:32 / sld		ICP2-HE_140915A	54	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Copper	ND	mg/L		0.001		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Iron	ND	mg/L		0.02		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Magnesium	ND	mg/L		1		E200.7	09/15/14 13:32 / sld		ICP2-HE_140915A	54	R100549
Manganese	ND	mg/L		0.001		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/24/14 15:13 / rgk	09/23/14 12:03	HGCV202-H_140924A	58	26288

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14090234-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 20:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Potassium	ND	mg/L		1		E200.7	09/15/14 13:32 / sld		ICP2-HE_140915A	54	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Sodium	ND	mg/L		1		E200.7	09/15/14 13:32 / sld		ICP2-HE_140915A	54	R100549
Uranium	ND	mg/L		0.0002		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
Zinc	0.015	mg/L		0.008		E200.8	09/18/14 06:29 / dck		ICPMS204-B_140917A	209	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Arsenic	ND	mg/L		0.001		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Barium	ND	mg/L		0.003		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:08 / sld	09/15/14 10:40	ICP2-HE_140916B	65	26146
Cadmium	ND	mg/L		0.00003		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Calcium	ND	mg/L		1		E200.7	09/16/14 15:08 / sld	09/15/14 10:40	ICP2-HE_140916B	65	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Copper	ND	mg/L		0.001		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Iron	ND	mg/L		0.02		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Lead	ND	mg/L		0.0003		E200.8	10/14/14 12:13 / dck	10/13/14 16:04	ICPMS204-B_141014A	24	26544
Magnesium	ND	mg/L		1		E200.7	09/16/14 15:08 / sld	09/15/14 10:40	ICP2-HE_140916B	65	26146
Manganese	ND	mg/L		0.001		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Mercury	ND	mg/L		5E-06		E245.1	09/24/14 15:17 / rgk	09/23/14 12:03	HGCV202-H_140924A	59	26288
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Potassium	ND	mg/L		1		E200.7	09/16/14 15:08 / sld	09/15/14 10:40	ICP2-HE_140916B	65	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14090234-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 20:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	ND	mg/L		1		E200.7	09/16/14 15:08 / sld	09/15/14 10:40	ICP2-HE_140916B	65	26146
Uranium	ND	mg/L		0.0002		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146
Zinc	ND	mg/L		0.008		E200.8	09/18/14 06:34 / dck	09/15/14 10:40	ICPMS204-B_140917A	210	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14090234-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	09/12/14 14:39 / cm		I24 (14410200)_140912A	47	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	99	mg/L		4		A2320 B	09/15/14 20:06 / SR		PHSC_101-H_140915A	132	R100537
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/15/14 20:06 / SR		PHSC_101-H_140915A	132	R100537
Chloride	49	mg/L		1		E300.0	09/15/14 21:40 / SR		IC102-H_140915A	50	R100569
Sulfate	98	mg/L		1		E300.0	09/15/14 21:40 / SR		IC102-H_140915A	50	R100569
Hardness as CaCO3	192	mg/L		1		A2340 B	09/15/14 13:43 / abb		CALC_140917A	421	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:26 / cm		FIA203-HE_140916B	17	R100599
Nitrogen, Nitrate+Nitrite as N	2.41	mg/L		0.05		E353.2	09/12/14 16:41 / cm		FIA203-HE_140912B	118	R100503
Nitrogen, Total	1.53	mg/L		0.05		A4500 N-C	09/24/14 10:31 / cm	09/23/14 07:38	FIA203-HE_140924A	27	26263
Phosphorus, Total as P	0.225	mg/L		0.005		E365.1	09/16/14 13:49 / cm	09/15/14 14:40	FIA202-HE_140916A	27	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Barium	0.040	mg/L		0.003		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:43 / sld		ICP2-HE_140915A	57	R100549
Cadmium	0.00013	mg/L		0.00003		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Calcium	56	mg/L		1		E200.7	09/15/14 13:43 / sld		ICP2-HE_140915A	57	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Copper	0.012	mg/L		0.001		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Iron	0.03	mg/L		0.02		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 13:43 / sld		ICP2-HE_140915A	57	R100549
Manganese	0.030	mg/L		0.001		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Mercury	5.5E-06	mg/L		5E-06		E245.1	09/24/14 15:21 / rgk	09/23/14 12:03	HGCV202-H_140924A	60	26288

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14090234-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 13:43 / sld		ICP2-HE_140915A	57	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Sodium	36	mg/L		1		E200.7	09/15/14 13:43 / sld		ICP2-HE_140915A	57	R100549
Uranium	0.0039	mg/L		0.0002		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
Zinc	0.027	mg/L		0.008		E200.8	09/18/14 06:38 / dck		ICPMS204-B_140917A	211	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.115	mg/L		0.009		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Arsenic	0.008	mg/L		0.001		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Barium	0.038	mg/L		0.003		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:12 / sld	09/15/14 10:40	ICP2-HE_140916B	66	26146
Cadmium	0.00025	mg/L		0.00003		E200.8	09/22/14 14:16 / dck	09/19/14 08:07	ICPMS204-B_140922A	47	26222
Calcium	59	mg/L		1		E200.7	09/16/14 15:12 / sld	09/15/14 10:40	ICP2-HE_140916B	66	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Copper	0.019	mg/L		0.001		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Iron	0.18	mg/L		0.02		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Lead	0.0015	mg/L		0.0003		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Magnesium	13	mg/L		1		E200.7	09/16/14 15:12 / sld	09/15/14 10:40	ICP2-HE_140916B	66	26146
Manganese	0.073	mg/L		0.001		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Mercury	0.000015	mg/L		5E-06		E245.1	09/24/14 15:25 / rgk	09/23/14 12:03	HGCV202-H_140924A	61	26288
Molybdenum	0.005	mg/L		0.005		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Potassium	7	mg/L		1		E200.7	09/16/14 15:12 / sld	09/15/14 10:40	ICP2-HE_140916B	66	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14090234-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	36	mg/L		1		E200.7	09/16/14 15:12 / sld	09/15/14 10:40	ICP2-HE_140916B	66	26146
Uranium	0.0041	mg/L		0.0002		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146
Zinc	0.048	mg/L		0.008		E200.8	09/18/14 06:43 / dck	09/15/14 10:40	ICPMS204-B_140917A	212	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14090234-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	09/12/14 14:39 / cm		I24 (14410200)_140912A	48	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 20:38 / SR		PHSC_101-H_140915A	139	R100537
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/15/14 20:38 / SR		PHSC_101-H_140915A	139	R100537
Chloride	40	mg/L		1		E300.0	09/15/14 21:51 / SR		IC102-H_140915A	51	R100569
Sulfate	85	mg/L		1		E300.0	09/15/14 21:51 / SR		IC102-H_140915A	51	R100569
Hardness as CaCO3	181	mg/L		1		A2340 B	09/15/14 13:47 / abb		CALC_140917A	432	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:27 / cm		FIA203-HE_140916B	18	R100599
Nitrogen, Nitrate+Nitrite as N	2.13	mg/L		0.05		E353.2	09/12/14 16:42 / cm		FIA203-HE_140912B	119	R100503
Nitrogen, Total	6.5	mg/L	D	0.2		A4500 N-C	09/24/14 10:37 / cm	09/23/14 07:44	FIA203-HE_140924A	32	26264
Phosphorus, Total as P	0.191	mg/L		0.005		E365.1	09/16/14 13:52 / cm	09/15/14 14:40	FIA202-HE_140916A	30	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Barium	0.039	mg/L		0.003		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:47 / sld		ICP2-HE_140915A	58	R100549
Cadmium	0.00011	mg/L		0.00003		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Calcium	53	mg/L		1		E200.7	09/15/14 13:47 / sld		ICP2-HE_140915A	58	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Copper	0.011	mg/L		0.001		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Iron	0.02	mg/L		0.02		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Lead	ND	mg/L		0.0003		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 13:47 / sld		ICP2-HE_140915A	58	R100549
Manganese	0.028	mg/L		0.001		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/25/14 16:35 / rgk	09/24/14 12:28	HGCV202-H_140925A	56	26304

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14090234-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 13:47 / sld		ICP2-HE_140915A	58	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Sodium	30	mg/L		1		E200.7	09/15/14 13:47 / sld		ICP2-HE_140915A	58	R100549
Uranium	0.0033	mg/L		0.0002		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
Zinc	0.021	mg/L		0.008		E200.8	09/18/14 06:47 / dck		ICPMS204-B_140917A	213	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.120	mg/L		0.009		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Barium	0.037	mg/L		0.003		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:23 / sld	09/15/14 10:40	ICP2-HE_140916B	69	26146
Cadmium	0.00020	mg/L		0.00003		E200.8	09/22/14 14:20 / dck	09/19/14 08:07	ICPMS204-B_140922A	48	26222
Calcium	56	mg/L		1		E200.7	09/16/14 15:23 / sld	09/15/14 10:40	ICP2-HE_140916B	69	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Copper	0.018	mg/L		0.001		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Iron	0.20	mg/L		0.02		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Lead	0.0016	mg/L		0.0003		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 15:23 / sld	09/15/14 10:40	ICP2-HE_140916B	69	26146
Manganese	0.071	mg/L		0.001		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Mercury	0.000013	mg/L		5E-06		E245.1	09/25/14 16:39 / rgk	09/24/14 12:28	HGCV202-H_140925A	57	26304
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Potassium	6	mg/L		1		E200.7	09/16/14 15:23 / sld	09/15/14 10:40	ICP2-HE_140916B	69	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14090234-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.7	09/16/14 15:23 / sld	09/15/14 10:40	ICP2-HE_140916B	69	26146
Uranium	0.0035	mg/L		0.0002		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146
Zinc	0.044	mg/L		0.008		E200.8	09/18/14 06:52 / dck	09/15/14 10:40	ICPMS204-B_140917A	214	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14090234-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	18	mg/L		2		A2540 D	09/12/14 14:40 / cm		I24 (14410200)_140912A	51	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 20:50 / SR		PHSC_101-H_140915A	143	R100537
Bicarbonate as HCO3	130	mg/L		4		A2320 B	09/15/14 20:50 / SR		PHSC_101-H_140915A	143	R100537
Chloride	38	mg/L		1		E300.0	09/15/14 22:02 / SR		IC102-H_140915A	52	R100569
Sulfate	86	mg/L		1		E300.0	09/15/14 22:02 / SR		IC102-H_140915A	52	R100569
Hardness as CaCO3	180	mg/L		1		A2340 B	09/15/14 13:51 / abb		CALC_140917A	443	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:28 / cm		FIA203-HE_140916B	19	R100599
Nitrogen, Nitrate+Nitrite as N	2.04	mg/L		0.05		E353.2	09/12/14 16:43 / cm		FIA203-HE_140912B	120	R100503
Nitrogen, Total	6.4	mg/L	D	0.2		A4500 N-C	09/24/14 10:38 / cm	09/23/14 07:44	FIA203-HE_140924A	33	26264
Phosphorus, Total as P	0.196	mg/L		0.005		E365.1	09/16/14 13:53 / cm	09/15/14 14:40	FIA202-HE_140916A	31	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Arsenic	0.007	mg/L		0.001		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Barium	0.042	mg/L		0.003		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:51 / sld		ICP2-HE_140915A	59	R100549
Cadmium	0.00006	mg/L		0.00003		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Calcium	53	mg/L		1		E200.7	09/15/14 13:51 / sld		ICP2-HE_140915A	59	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Copper	0.009	mg/L		0.001		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Iron	0.05	mg/L		0.02		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Lead	0.0005	mg/L		0.0003		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Magnesium	11	mg/L		1		E200.7	09/15/14 13:51 / sld		ICP2-HE_140915A	59	R100549
Manganese	0.097	mg/L		0.001		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/25/14 16:44 / rgk	09/24/14 12:28	HGCV202-H_140925A	58	26304

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14090234-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Potassium	6	mg/L		1		E200.7	09/15/14 13:51 / sld		ICP2-HE_140915A	59	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Sodium	30	mg/L		1		E200.7	09/15/14 13:51 / sld		ICP2-HE_140915A	59	R100549
Uranium	0.0037	mg/L		0.0002		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
Zinc	0.036	mg/L		0.008		E200.8	09/18/14 06:56 / dck		ICPMS204-B_140917A	215	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.413	mg/L		0.009		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Antimony	0.0005	mg/L		0.0005		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Arsenic	0.009	mg/L		0.001		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Barium	0.043	mg/L		0.003		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:26 / sld	09/15/14 10:40	ICP2-HE_140916B	70	26146
Cadmium	0.00040	mg/L		0.00003		E200.8	09/22/14 14:38 / dck	09/19/14 08:07	ICPMS204-B_140922A	52	26222
Calcium	56	mg/L		1		E200.7	09/16/14 15:26 / sld	09/15/14 10:40	ICP2-HE_140916B	70	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Copper	0.034	mg/L		0.001		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Iron	0.58	mg/L		0.02		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Lead	0.0063	mg/L		0.0003		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 15:26 / sld	09/15/14 10:40	ICP2-HE_140916B	70	26146
Manganese	0.144	mg/L		0.001		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Mercury	0.000063	mg/L		5E-06		E245.1	09/25/14 16:48 / rgk	09/24/14 12:28	HGCV202-H_140925A	59	26304
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Potassium	6	mg/L		1		E200.7	09/16/14 15:26 / sld	09/15/14 10:40	ICP2-HE_140916B	70	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14090234-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	30	mg/L		1		E200.7	09/16/14 15:26 / sld	09/15/14 10:40	ICP2-HE_140916B	70	26146
Uranium	0.0041	mg/L		0.0002		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146
Zinc	0.088	mg/L		0.008		E200.8	09/18/14 07:23 / dck	09/15/14 10:40	ICPMS204-B_140917A	221	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14090234-017
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	14	mg/L		1		A2540 D	09/12/14 14:41 / cm		I24 (14410200)_140912A	53	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 21:10 / SR		PHSC_101-H_140915A	146	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 21:10 / SR		PHSC_101-H_140915A	146	R100537
Chloride	39	mg/L		1		E300.0	09/15/14 22:13 / SR		IC102-H_140915A	53	R100569
Sulfate	94	mg/L		1		E300.0	09/15/14 22:13 / SR		IC102-H_140915A	53	R100569
Hardness as CaCO3	180	mg/L		1		A2340 B	09/15/14 13:54 / abb		CALC_140917A	454	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:30 / cm		FIA203-HE_140916B	20	R100599
Nitrogen, Nitrate+Nitrite as N	1.36	mg/L		0.05		E353.2	09/12/14 16:17 / cm		FIA203-HE_140912B	98	R100503
Nitrogen, Total	5.3	mg/L	D	0.2		A4500 N-C	09/24/14 10:39 / cm	09/23/14 07:44	FIA203-HE_140924A	34	26264
Phosphorus, Total as P	0.197	mg/L		0.005		E365.1	09/16/14 13:54 / cm	09/15/14 14:40	FIA202-HE_140916A	32	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Arsenic	0.009	mg/L		0.001		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Barium	0.038	mg/L		0.003		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:54 / sld		ICP2-HE_140915A	60	R100549
Cadmium	0.00018	mg/L		0.00003		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Calcium	53	mg/L		1		E200.7	09/15/14 13:54 / sld		ICP2-HE_140915A	60	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Copper	0.012	mg/L		0.001		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Iron	0.04	mg/L		0.02		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Lead	0.0004	mg/L		0.0003		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Magnesium	11	mg/L		1		E200.7	09/15/14 13:54 / sld		ICP2-HE_140915A	60	R100549
Manganese	0.053	mg/L		0.001		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Mercury	ND	mg/L		5E-06		E245.1	09/25/14 16:52 / rgk	09/24/14 12:28	HGCV202-H_140925A	60	26304

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14090234-017
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Potassium	5	mg/L		1		E200.7	09/15/14 13:54 / sld		ICP2-HE_140915A	60	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Sodium	31	mg/L		1		E200.7	09/15/14 13:54 / sld		ICP2-HE_140915A	60	R100549
Uranium	0.0042	mg/L		0.0002		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
Zinc	0.047	mg/L		0.008		E200.8	09/18/14 07:27 / dck		ICPMS204-B_140917A	222	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.346	mg/L		0.009		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Arsenic	0.010	mg/L		0.001		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Barium	0.039	mg/L		0.003		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:30 / sld	09/15/14 10:40	ICP2-HE_140916B	71	26146
Cadmium	0.00045	mg/L		0.00003		E200.8	09/22/14 14:42 / dck	09/19/14 08:07	ICPMS204-B_140922A	53	26222
Calcium	56	mg/L		1		E200.7	09/16/14 15:30 / sld	09/15/14 10:40	ICP2-HE_140916B	71	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Copper	0.030	mg/L		0.001		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Iron	0.49	mg/L		0.02		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Lead	0.0043	mg/L		0.0003		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 15:30 / sld	09/15/14 10:40	ICP2-HE_140916B	71	26146
Manganese	0.118	mg/L		0.001		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Mercury	0.000040	mg/L		5E-06		E245.1	09/25/14 16:56 / rgk	09/24/14 12:28	HGCV202-H_140925A	61	26304
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Potassium	6	mg/L		1		E200.7	09/16/14 15:30 / sld	09/15/14 10:40	ICP2-HE_140916B	71	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14090234-017
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	31	mg/L		1		E200.7	09/16/14 15:30 / sld	09/15/14 10:40	ICP2-HE_140916B	71	26146
Uranium	0.0045	mg/L		0.0002		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146
Zinc	0.095	mg/L		0.008		E200.8	09/18/14 07:32 / dck	09/15/14 10:40	ICPMS204-B_140917A	223	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14090234-018
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	13	mg/L		1		A2540 D	09/12/14 14:41 / cm		I24 (14410200)_140912A	54	TSS140912A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/15/14 21:15 / SR		PHSC_101-H_140915A	148	R100537
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/15/14 21:15 / SR		PHSC_101-H_140915A	148	R100537
Chloride	38	mg/L		1		E300.0	09/15/14 22:24 / SR		IC102-H_140915A	54	R100569
Sulfate	95	mg/L		1		E300.0	09/15/14 22:24 / SR		IC102-H_140915A	54	R100569
Hardness as CaCO3	182	mg/L		1		A2340 B	09/15/14 13:58 / abb		CALC_140917A	465	R100638
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	09/16/14 14:31 / cm		FIA203-HE_140916B	21	R100599
Nitrogen, Nitrate+Nitrite as N	1.69	mg/L		0.05		E353.2	09/12/14 16:21 / cm		FIA203-HE_140912B	101	R100503
Nitrogen, Total	5.4	mg/L	D	0.2		A4500 N-C	09/24/14 10:41 / cm	09/23/14 07:44	FIA203-HE_140924A	35	26264
Phosphorus, Total as P	0.174	mg/L		0.005		E365.1	09/16/14 13:55 / cm	09/15/14 14:40	FIA202-HE_140916A	33	26164
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Arsenic	0.008	mg/L		0.001		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Barium	0.042	mg/L		0.003		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Boron	ND	mg/L		0.1		E200.7	09/15/14 13:58 / sld		ICP2-HE_140915A	61	R100549
Cadmium	0.00020	mg/L		0.00003		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Calcium	54	mg/L		1		E200.7	09/15/14 13:58 / sld		ICP2-HE_140915A	61	R100549
Chromium	ND	mg/L		0.01		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Copper	0.011	mg/L		0.001		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Iron	0.04	mg/L		0.02		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Lead	0.0004	mg/L		0.0003		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Magnesium	12	mg/L		1		E200.7	09/15/14 13:58 / sld		ICP2-HE_140915A	61	R100549
Manganese	0.052	mg/L		0.001		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Mercury	6.2E-06	mg/L		5E-06		E245.1	09/25/14 17:01 / rgk	09/24/14 12:28	HGCV202-H_140925A	62	26304

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14090234-018
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Nickel	ND	mg/L		0.002		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Potassium	5	mg/L		1		E200.7	09/15/14 13:58 / sld		ICP2-HE_140915A	61	R100549
Selenium	ND	mg/L		0.001		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Silver	ND	mg/L		0.0002		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Sodium	32	mg/L		1		E200.7	09/15/14 13:58 / sld		ICP2-HE_140915A	61	R100549
Uranium	0.0044	mg/L		0.0002		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
Zinc	0.058	mg/L		0.008		E200.8	09/18/14 07:36 / dck		ICPMS204-B_140917A	224	R100637
METALS, TOTAL RECOVERABLE											
Aluminum	0.294	mg/L		0.009		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Antimony	ND	mg/L		0.0005		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Arsenic	0.010	mg/L		0.001		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Barium	0.041	mg/L		0.003		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Beryllium	ND	mg/L		0.0008		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Boron	ND	mg/L		0.1		E200.7	09/16/14 15:34 / sld	09/15/14 10:40	ICP2-HE_140916B	72	26146
Cadmium	0.00043	mg/L		0.00003		E200.8	09/22/14 14:47 / dck	09/19/14 08:07	ICPMS204-B_140922A	54	26222
Calcium	57	mg/L		1		E200.7	09/16/14 15:34 / sld	09/15/14 10:40	ICP2-HE_140916B	72	26146
Chromium	ND	mg/L		0.01		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Cobalt	ND	mg/L		0.01		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Copper	0.027	mg/L		0.001		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Iron	0.45	mg/L		0.02		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Lead	0.0038	mg/L		0.0003		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Magnesium	12	mg/L		1		E200.7	09/16/14 15:34 / sld	09/15/14 10:40	ICP2-HE_140916B	72	26146
Manganese	0.119	mg/L		0.001		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Mercury	0.000036	mg/L		5E-06		E245.1	09/25/14 17:05 / rgk	09/24/14 12:28	HGCV202-H_140925A	63	26304
Molybdenum	ND	mg/L		0.005		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Nickel	ND	mg/L		0.002		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Potassium	6	mg/L		1		E200.7	09/16/14 15:34 / sld	09/15/14 10:40	ICP2-HE_140916B	72	26146
Selenium	ND	mg/L		0.001		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Silver	ND	mg/L		0.0002		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14090234-018
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	32	mg/L		1		E200.7	09/16/14 15:34 / sld	09/15/14 10:40	ICP2-HE_140916B	72	26146
Uranium	0.0046	mg/L		0.0002		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Vanadium	ND	mg/L		0.1		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146
Zinc	0.095	mg/L		0.008		E200.8	09/18/14 07:40 / dck	09/15/14 10:40	ICPMS204-B_140917A	225	26146

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Lab ID: H14090234-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.8	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	10	R101208
PHYSICAL CHARACTERISTICS											
Moisture	64.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	11	R101084
3050 EXTRACTABLE METALS											
Aluminum	7940	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Arsenic	42	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Barium	134	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Cadmium	4.9	mg/kg		0.2		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Chromium	22	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Copper	309	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Iron	13300	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Lead	171	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Manganese	1770	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Molybdenum	9	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Nickel	12	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	26	26333
Vanadium	43	mg/kg		1		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
Zinc	900	mg/kg		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	87	26333
METALS, TOTAL											
Mercury	0.43	mg/kg		0.10		SW7471B	10/07/14 17:56 / sbk	10/01/14 10:32	HGCV201-H_141007A	163	26427
METAL, DRY WEIGHT											
Aluminum	22400	mg/kg-dry		10		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Lab ID: H14090234-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Arsenic	118	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Barium	379	mg/kg-dry		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Cadmium	13.7	mg/kg-dry		0.5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Chromium	63	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Cobalt	8	mg/kg-dry		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Copper	873	mg/kg-dry		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Iron	37600	mg/kg-dry		9		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Lead	483	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Manganese	4990	mg/kg-dry		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Molybdenum	25	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Nickel	35	mg/kg-dry		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Uranium	10	mg/kg-dry		5		SW6020	09/30/14 13:55 / dck	09/29/14 08:00	ICPMS204-B_140930A	182	26333
Vanadium	123	mg/kg-dry		2		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Zinc	2540	mg/kg-dry		5		SW6010B	09/30/14 21:48 / sld	09/29/14 08:00	ICP2-HE_140930A	190	26333
Mercury	1.2	mg/kg-dry		0.10		SW7471B	10/07/14 17:56 / sbk	10/01/14 10:32	HGCV201-H_141007A	172	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Lab ID: H14090234-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	40.9	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	11	R101208
PHYSICAL CHARACTERISTICS											
Moisture	20.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	12	R101084
3050 EXTRACTABLE METALS											
Aluminum	2830	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Arsenic	17	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Barium	58	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Chromium	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Copper	62	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Iron	7070	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Lead	43	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Manganese	996	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Nickel	ND	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	62	26334
Vanadium	22	mg/kg		1		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
Zinc	228	mg/kg		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	119	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	10/02/14 15:47 / rgk	10/01/14 10:32	HGCV201-H_141002B	15	26387
METAL, DRY WEIGHT											
Aluminum	3580	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Lab ID: H14090234-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Arsenic	21	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Barium	73	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Cadmium	0.7	mg/kg-dry		0.2		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Chromium	6	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Copper	78	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Iron	8940	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Lead	54	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Manganese	1260	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Nickel	ND	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	201	26334
Vanadium	28	mg/kg-dry		1		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Zinc	288	mg/kg-dry		5		SW6010B	09/30/14 23:46 / sld	09/29/14 08:00	ICP2-HE_140930A	222	26334
Mercury	ND	mg/kg-dry		0.10		SW7471B	10/02/14 15:47 / rgk	10/01/14 10:32	HGCV201-H_141002B	51	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14090234-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	39.8	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	12	R101208
PHYSICAL CHARACTERISTICS											
Moisture	19.4	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	14	R101084
3050 EXTRACTABLE METALS											
Aluminum	3210	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Arsenic	14	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Barium	68	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Copper	45	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Iron	6300	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Lead	51	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Manganese	832	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	98	26335
Vanadium	16	mg/kg		1		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
Zinc	189	mg/kg		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	156	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	10/02/14 15:49 / rgk	10/01/14 10:32	HGCV201-H_141002B	16	26387
METAL, DRY WEIGHT											
Aluminum	3980	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14090234-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Arsenic	17	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Barium	85	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Cadmium	0.6	mg/kg-dry		0.2		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Chromium	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Copper	56	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Iron	7810	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Lead	63	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Manganese	1030	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:16 / dck	09/29/14 08:00	ICPMS204-B_140930A	220	26335
Vanadium	20	mg/kg-dry		1		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Zinc	234	mg/kg-dry		5		SW6010B	10/01/14 02:04 / sld	09/29/14 08:00	ICP2-HE_140930A	259	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	10/02/14 15:49 / rgk	10/01/14 10:32	HGCV201-H_141002B	52	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14090234-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.0	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	13	R101208
PHYSICAL CHARACTERISTICS											
Moisture	61.8	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	15	R101084
3050 EXTRACTABLE METALS											
Aluminum	6800	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Arsenic	33	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Barium	122	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Cadmium	3.5	mg/kg		0.2		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Chromium	20	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Copper	368	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Iron	13000	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Lead	179	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Manganese	1320	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Molybdenum	8	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Nickel	9	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	27	26333
Vanadium	38	mg/kg		1		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
Zinc	957	mg/kg		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	88	26333
METALS, TOTAL											
Mercury	0.60	mg/kg		0.10		SW7471B	10/02/14 16:48 / rgk	10/01/14 10:32	HGCV201-H_141002B	33	26387
METAL, DRY WEIGHT											
Aluminum	17800	mg/kg-dry		9		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14090234-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Arsenic	87	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Barium	320	mg/kg-dry		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Cadmium	9.2	mg/kg-dry		0.4		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Chromium	53	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Copper	965	mg/kg-dry		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Iron	34100	mg/kg-dry		8		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Lead	468	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Manganese	3460	mg/kg-dry		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Molybdenum	20	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Nickel	24	mg/kg-dry		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Silver	6	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Uranium	8	mg/kg-dry		5		SW6020	09/30/14 13:59 / dck	09/29/14 08:00	ICPMS204-B_140930A	183	26333
Vanadium	100	mg/kg-dry		2		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Zinc	2510	mg/kg-dry		5		SW6010B	09/30/14 21:51 / sld	09/29/14 08:00	ICP2-HE_140930A	191	26333
Mercury	1.6	mg/kg-dry		0.26		SW7471B	10/02/14 16:48 / rgk	10/01/14 10:32	HGCV201-H_141002B	69	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14090234-023
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	31.3	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	14	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.7	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	16	R101084
3050 EXTRACTABLE METALS											
Aluminum	3490	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Arsenic	17	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Barium	49	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Cadmium	1.1	mg/kg		0.2		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Chromium	11	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Copper	148	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Iron	16600	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Lead	48	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Manganese	513	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Nickel	ND	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	63	26334
Vanadium	36	mg/kg		1		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
Zinc	392	mg/kg		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	120	26334
METALS, TOTAL											
Mercury	0.12	mg/kg		0.10		SW7471B	10/02/14 15:54 / rgk	10/01/14 10:32	HGCV201-H_141002B	18	26387
METAL, DRY WEIGHT											
Aluminum	4460	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14090234-023
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Arsenic	21	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Barium	63	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Cadmium	1.4	mg/kg-dry		0.2		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Chromium	14	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Copper	189	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Iron	21200	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Lead	61	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Manganese	656	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Nickel	ND	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	202	26334
Vanadium	46	mg/kg-dry		1		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Zinc	501	mg/kg-dry		5		SW6010B	09/30/14 23:50 / sld	09/29/14 08:00	ICP2-HE_140930A	223	R100994
Mercury	0.15	mg/kg-dry		0.10		SW7471B	10/02/14 15:54 / rgk	10/01/14 10:32	HGCV201-H_141002B	54	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14090234-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	26.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	15	R101208
PHYSICAL CHARACTERISTICS											
Moisture	17.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	17	R101084
3050 EXTRACTABLE METALS											
Aluminum	3170	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Arsenic	12	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Barium	53	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Copper	83	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Iron	7250	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Lead	44	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Manganese	369	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	99	26335
Vanadium	14	mg/kg		1		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
Zinc	224	mg/kg		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	159	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	10/02/14 15:56 / rgk	10/01/14 10:32	HGCV201-H_141002B	19	26387
METAL, DRY WEIGHT											
Aluminum	3850	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14090234-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/11/14 10:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Arsenic	15	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Barium	65	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Cadmium	0.7	mg/kg-dry		0.2		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Chromium	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Copper	101	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Iron	8800	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Lead	54	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Manganese	447	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:20 / dck	09/29/14 08:00	ICPMS204-B_140930A	221	26335
Vanadium	17	mg/kg-dry		1		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Zinc	272	mg/kg-dry		5		SW6010B	10/01/14 02:15 / sld	09/29/14 08:00	ICP2-HE_140930A	262	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	10/02/14 15:56 / rgk	10/01/14 10:32	HGCV201-H_141002B	55	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Lab ID: H14090234-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.7	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	16	R101208
PHYSICAL CHARACTERISTICS											
Moisture	72.4	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	18	R101084
3050 EXTRACTABLE METALS											
Aluminum	5120	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Arsenic	26	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Barium	85	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Boron	6	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Cadmium	3.9	mg/kg		0.2		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Chromium	14	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Copper	281	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Iron	8310	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Lead	153	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Manganese	569	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Nickel	8	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	28	26333
Vanadium	20	mg/kg		1		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
Zinc	608	mg/kg		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	89	26333
METALS, TOTAL											
Mercury	0.80	mg/kg		0.10		SW7471B	10/02/14 16:51 / rgk	10/01/14 10:32	HGCV201-H_141002B	34	26387
METAL, DRY WEIGHT											
Aluminum	18600	mg/kg-dry		10		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Lab ID: H14090234-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Arsenic	94	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Barium	308	mg/kg-dry		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Boron	20	mg/kg-dry		20		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Cadmium	14.3	mg/kg-dry		0.6		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Chromium	49	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Copper	1020	mg/kg-dry		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Iron	30100	mg/kg-dry		10		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Lead	554	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Manganese	2060	mg/kg-dry		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Molybdenum	15	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Nickel	29	mg/kg-dry		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Silver	8	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Uranium	10	mg/kg-dry		5		SW6020	09/30/14 14:03 / dck	09/29/14 08:00	ICPMS204-B_140930A	184	26333
Vanadium	71	mg/kg-dry		3		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Zinc	2210	mg/kg-dry		5		SW6010B	09/30/14 21:55 / sld	09/29/14 08:00	ICP2-HE_140930A	192	26333
Mercury	2.9	mg/kg-dry		0.36		SW7471B	10/02/14 16:51 / rgk	10/01/14 10:32	HGCV201-H_141002B	70	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14090234-026
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	23.2	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	17	R101208
PHYSICAL CHARACTERISTICS											
Moisture	24.0	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	19	R101084
3050 EXTRACTABLE METALS											
Aluminum	2620	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Arsenic	40	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Barium	41	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Cadmium	0.9	mg/kg		0.2		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Chromium	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Copper	312	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Iron	5240	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Lead	29	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Manganese	155	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Nickel	ND	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	64	26334
Vanadium	12	mg/kg		1		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
Zinc	165	mg/kg		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	121	26334
METALS, TOTAL											
Mercury	0.19	mg/kg		0.10		SW7471B	10/02/14 16:02 / rgk	10/01/14 10:32	HGCV201-H_141002B	21	26387
METAL, DRY WEIGHT											
Aluminum	3450	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14090234-026
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Arsenic	52	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Barium	54	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Cadmium	1.2	mg/kg-dry		0.2		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Chromium	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Copper	411	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Iron	6900	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Lead	38	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Manganese	203	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Nickel	ND	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	203	26334
Vanadium	15	mg/kg-dry		1		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Zinc	217	mg/kg-dry		5		SW6010B	09/30/14 23:53 / sld	09/29/14 08:00	ICP2-HE_140930A	224	26334
Mercury	0.24	mg/kg-dry		0.10		SW7471B	10/02/14 16:02 / rgk	10/01/14 10:32	HGCV201-H_141002B	57	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14090234-027
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	39.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	18	R101208
PHYSICAL CHARACTERISTICS											
Moisture	12.1	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	20	R101084
3050 EXTRACTABLE METALS											
Aluminum	2530	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Arsenic	10	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Barium	35	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Copper	87	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Iron	4750	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Lead	40	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Manganese	109	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	100	26335
Vanadium	10	mg/kg		1		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
Zinc	107	mg/kg		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	160	26335
METALS, TOTAL											
Mercury	0.14	mg/kg		0.10		SW7471B	10/02/14 16:04 / rgk	10/01/14 10:32	HGCV201-H_141002B	22	26387
METAL, DRY WEIGHT											
Aluminum	2880	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14090234-027
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 16:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Arsenic	12	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Barium	40	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Cadmium	0.6	mg/kg-dry		0.2		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Chromium	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Copper	99	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Iron	5410	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Lead	46	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Manganese	124	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	222	26335
Vanadium	11	mg/kg-dry		1		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Zinc	121	mg/kg-dry		5		SW6010B	10/01/14 02:18 / sld	09/29/14 08:00	ICP2-HE_140930A	263	26335
Mercury	0.15	mg/kg-dry		0.10		SW7471B	10/02/14 16:04 / rgk	10/01/14 10:32	HGCV201-H_141002B	58	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Lab ID: H14090234-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	11.5	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	19	R101208
PHYSICAL CHARACTERISTICS											
Moisture	65.7	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	21	R101084
3050 EXTRACTABLE METALS											
Aluminum	6820	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Arsenic	17	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Barium	97	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Cadmium	2.9	mg/kg		0.2		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Chromium	10	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Copper	228	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Iron	8610	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Lead	98	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Manganese	354	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Nickel	ND	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	29	26333
Vanadium	18	mg/kg		1		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
Zinc	532	mg/kg		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	92	26333
METALS, TOTAL											
Mercury	0.53	mg/kg		0.10		SW7471B	10/07/14 17:35 / sbk	10/01/14 10:32	HGCV201-H_141007A	158	26427
METAL, DRY WEIGHT											
Aluminum	19900	mg/kg-dry		10		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-028
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Arsenic	51	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Barium	282	mg/kg-dry		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Cadmium	8.3	mg/kg-dry		0.5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Chromium	28	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Copper	665	mg/kg-dry		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Iron	25100	mg/kg-dry		9		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Lead	285	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Manganese	1030	mg/kg-dry		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Molybdenum	13	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Nickel	13	mg/kg-dry		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Uranium	8	mg/kg-dry		5		SW6020	09/30/14 14:08 / dck	09/29/14 08:00	ICPMS204-B_140930A	185	26333
Vanadium	53	mg/kg-dry		2		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Zinc	1550	mg/kg-dry		5		SW6010B	09/30/14 22:06 / sld	09/29/14 08:00	ICP2-HE_140930A	195	26333
Mercury	1.5	mg/kg-dry		0.29		SW7471B	10/07/14 17:35 / sbk	10/01/14 10:32	HGCV201-H_141007A	167	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Lab ID: H14090234-029
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	33.9	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	20	R101208
PHYSICAL CHARACTERISTICS											
Moisture	57.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	22	R101084
3050 EXTRACTABLE METALS											
Aluminum	7920	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Arsenic	10	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Barium	84	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Cadmium	2.2	mg/kg		0.2		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Chromium	5	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Copper	128	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Iron	8530	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Lead	69	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Manganese	452	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Nickel	ND	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	65	26334
Vanadium	17	mg/kg		1		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
Zinc	346	mg/kg		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	122	26334
METALS, TOTAL											
Mercury	0.37	mg/kg		0.10		SW7471B	10/02/14 16:21 / rgk	10/01/14 10:32	HGCV201-H_141002B	29	26387
METAL, DRY WEIGHT											
Aluminum	18500	mg/kg-dry		8		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Lab ID: H14090234-029
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Arsenic	23	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Barium	195	mg/kg-dry		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Cadmium	5.2	mg/kg-dry		0.4		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Chromium	12	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Copper	299	mg/kg-dry		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Iron	19900	mg/kg-dry		7		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Lead	160	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Manganese	1060	mg/kg-dry		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Nickel	6	mg/kg-dry		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:51 / dck	09/29/14 08:00	ICPMS204-B_140930A	204	26334
Vanadium	39	mg/kg-dry		2		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Zinc	808	mg/kg-dry		5		SW6010B	09/30/14 23:57 / sld	09/29/14 08:00	ICP2-HE_140930A	225	26334
Mercury	0.85	mg/kg-dry		0.10		SW7471B	10/02/14 16:21 / rgk	10/01/14 10:32	HGCV201-H_141002B	65	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14090234-030
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	11.0	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	21	R101208
PHYSICAL CHARACTERISTICS											
Moisture	60.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	24	R101084
3050 EXTRACTABLE METALS											
Aluminum	10700	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Arsenic	7	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Barium	138	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Cadmium	1.4	mg/kg		0.2		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Copper	58	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Iron	9160	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Lead	26	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Manganese	380	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	101	26335
Vanadium	10	mg/kg		1		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
Zinc	229	mg/kg		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	161	26335
METALS, TOTAL											
Mercury	0.13	mg/kg		0.10		SW7471B	10/02/14 16:23 / rgk	10/01/14 10:32	HGCV201-H_141002B	30	26387
METAL, DRY WEIGHT											
Aluminum	26900	mg/kg-dry		9		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14090234-030
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Arsenic	18	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Barium	347	mg/kg-dry		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Cadmium	3.5	mg/kg-dry		0.4		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Chromium	8	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Copper	145	mg/kg-dry		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Iron	23000	mg/kg-dry		8		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Lead	65	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Manganese	955	mg/kg-dry		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:29 / dck	09/29/14 08:00	ICPMS204-B_140930A	223	26335
Vanadium	26	mg/kg-dry		2		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Zinc	575	mg/kg-dry		5		SW6010B	10/01/14 02:22 / sld	09/29/14 08:00	ICP2-HE_140930A	264	26335
Mercury	0.34	mg/kg-dry		0.10		SW7471B	10/02/14 16:23 / rgk	10/01/14 10:32	HGCV201-H_141002B	66	26387

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve <0.065mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-031
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	11.5	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	22	R101208
PHYSICAL CHARACTERISTICS											
Moisture	70.5	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	25	R101084
3050 EXTRACTABLE METALS											
Aluminum	7530	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Arsenic	14	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Barium	101	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Cadmium	2.6	mg/kg		0.2		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Chromium	8	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Copper	200	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Iron	8560	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Lead	106	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Manganese	482	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Nickel	ND	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	33	26333
Vanadium	17	mg/kg		1		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
Zinc	487	mg/kg		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	93	26333
METALS, TOTAL											
Mercury	0.49	mg/kg		0.10		SW7471B	09/30/14 15:04 / rgk	09/29/14 13:18	HGCV201-H_140930A	99	26355
METAL, DRY WEIGHT											
Aluminum	25600	mg/kg-dry		10		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	196	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve <0.065mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-031
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Arsenic	48	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Barium	344	mg/kg-dry		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Cadmium	9.0	mg/kg-dry		0.5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Chromium	26	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Copper	677	mg/kg-dry		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Iron	29100	mg/kg-dry		10		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Lead	359	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Manganese	1640	mg/kg-dry		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Molybdenum	8	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Nickel	13	mg/kg-dry		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Uranium	7	mg/kg-dry		5		SW6020	09/30/14 14:25 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 186	26333
Vanadium	57	mg/kg-dry		2		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Zinc	1650	mg/kg-dry		5		SW6010B	09/30/14 22:10 / sld	09/29/14 08:00	ICP2-HE_140930A	: 196	26333
Mercury	1.7	mg/kg-dry		0.10		SW7471B	09/30/14 15:04 / rgk	09/29/14 13:18	HGCV201-H_140930A	: 201	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 0.065-1mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-032
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	33.8	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	23	R101208
PHYSICAL CHARACTERISTICS											
Moisture	44.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	26	R101084
3050 EXTRACTABLE METALS											
Aluminum	10200	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Arsenic	8	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Barium	102	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Cadmium	2.7	mg/kg		0.2		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Chromium	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Copper	109	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Iron	9590	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Lead	74	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Manganese	519	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	66	26334
Vanadium	16	mg/kg		1		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
Zinc	327	mg/kg		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	123	26334
METALS, TOTAL											
Mercury	0.32	mg/kg		0.10		SW7471B	09/30/14 13:54 / rgk	09/29/14 13:18	HGCV201-H_140930A	71	26355
METAL, DRY WEIGHT											
Aluminum	18400	mg/kg-dry		6		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	226	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 0.065-1mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-032
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Arsenic	15	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Barium	186	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Boron	ND	mg/kg-dry		8		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Cadmium	4.8	mg/kg-dry		0.3		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Chromium	8	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Copper	198	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Iron	17400	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Lead	135	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Manganese	942	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 16:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 205	26334
Vanadium	29	mg/kg-dry		1		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Zinc	593	mg/kg-dry		5		SW6010B	10/01/14 00:01 / sld	09/29/14 08:00	ICP2-HE_140930A	: 226	26334
Mercury	0.58	mg/kg-dry		0.10		SW7471B	09/30/14 13:54 / rgk	09/29/14 13:18	HGCV201-H_140930A	: 173	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 1-2mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-033
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	17.7	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	24	R101208
PHYSICAL CHARACTERISTICS											
Moisture	48.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	27	R101084
3050 EXTRACTABLE METALS											
Aluminum	14700	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Arsenic	9	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Barium	216	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Cadmium	1.4	mg/kg		0.2		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Copper	66	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Iron	12000	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Lead	94	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Manganese	957	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	102	26335
Vanadium	15	mg/kg		1		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
Zinc	313	mg/kg		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	162	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:04 / rgk	09/29/14 13:18	HGCV201-H_140930A	75	26355
METAL, DRY WEIGHT											
Aluminum	28600	mg/kg-dry		7		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #1 Sediment Sieve 1-2mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-033
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Arsenic	18	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Barium	421	mg/kg-dry		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Boron	ND	mg/kg-dry		9		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Cadmium	2.8	mg/kg-dry		0.3		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Chromium	7	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Copper	127	mg/kg-dry		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Iron	23400	mg/kg-dry		6		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Lead	182	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Manganese	1860	mg/kg-dry		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	224	26335
Vanadium	29	mg/kg-dry		1		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Zinc	609	mg/kg-dry		5		SW6010B	10/01/14 02:26 / sld	09/29/14 08:00	ICP2-HE_140930A	265	26335
Mercury	0.14	mg/kg-dry		0.10		SW7471B	09/30/14 14:04 / rgk	09/29/14 13:18	HGCV201-H_140930A	177	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve <0.065mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-034
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	10.7	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	25	R101208
PHYSICAL CHARACTERISTICS											
Moisture	71.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	28	R101084
3050 EXTRACTABLE METALS											
Aluminum	6750	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Arsenic	15	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Barium	87	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Cadmium	2.6	mg/kg		0.2		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Chromium	8	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Copper	210	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Iron	7780	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Lead	94	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Manganese	242	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Nickel	ND	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	34	26333
Vanadium	16	mg/kg		1		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
Zinc	490	mg/kg		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	94	26333
METALS, TOTAL											
Mercury	0.48	mg/kg		0.10		SW7471B	09/30/14 15:06 / rgk	09/29/14 13:18	HGCV201-H_140930A	100	26355
METAL, DRY WEIGHT											
Aluminum	24000	mg/kg-dry		10		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	197	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve <0.065mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-034
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Arsenic	53	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Barium	309	mg/kg-dry		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Boron	ND	mg/kg-dry		20		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Cadmium	9.4	mg/kg-dry		0.6		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Chromium	27	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Copper	745	mg/kg-dry		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Iron	27700	mg/kg-dry		10		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Lead	333	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Manganese	860	mg/kg-dry		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Molybdenum	13	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Nickel	15	mg/kg-dry		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Uranium	11	mg/kg-dry		5		SW6020	09/30/14 14:30 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 187	26333
Vanadium	58	mg/kg-dry		3		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Zinc	1740	mg/kg-dry		5		SW6010B	09/30/14 22:14 / sld	09/29/14 08:00	ICP2-HE_140930A	: 197	26333
Mercury	1.7	mg/kg-dry		0.10		SW7471B	09/30/14 15:06 / rgk	09/29/14 13:18	HGCV201-H_140930A	: 202	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 0.065-1mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-035
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	33.0	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	26	R101208
PHYSICAL CHARACTERISTICS											
Moisture	48.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	29	R101084
3050 EXTRACTABLE METALS											
Aluminum	8940	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Arsenic	14	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Barium	107	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Cadmium	3.3	mg/kg		0.2		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Chromium	5	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Copper	127	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Iron	9910	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Lead	85	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Manganese	375	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	67	26334
Vanadium	18	mg/kg		1		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
Zinc	601	mg/kg		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	124	26334
METALS, TOTAL											
Mercury	0.39	mg/kg		0.10		SW7471B	09/30/14 14:09 / rgk	09/29/14 13:18	HGCV201-H_140930A	77	26355
METAL, DRY WEIGHT											
Aluminum	17500	mg/kg-dry		7		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	227	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 0.065-1mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-035
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Arsenic	27	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Barium	209	mg/kg-dry		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Boron	ND	mg/kg-dry		9		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Cadmium	6.5	mg/kg-dry		0.3		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Chromium	10	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Copper	249	mg/kg-dry		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Iron	19400	mg/kg-dry		6		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Lead	166	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Manganese	734	mg/kg-dry		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Nickel	5	mg/kg-dry		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 206	26334
Vanadium	35	mg/kg-dry		1		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Zinc	1170	mg/kg-dry		5		SW6010B	10/01/14 00:04 / sld	09/29/14 08:00	ICP2-HE_140930A	: 227	26334
Mercury	0.76	mg/kg-dry		0.10		SW7471B	09/30/14 14:09 / rgk	09/29/14 13:18	HGCV201-H_140930A	: 179	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 1-2mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-036
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	11.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	27	R101208
PHYSICAL CHARACTERISTICS											
Moisture	54.8	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	30	R101084
3050 EXTRACTABLE METALS											
Aluminum	12100	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Arsenic	14	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Barium	155	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Cadmium	1.6	mg/kg		0.2		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Copper	101	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Iron	9500	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Lead	36	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Manganese	381	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	103	26335
Vanadium	11	mg/kg		1		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
Zinc	269	mg/kg		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	163	26335
METALS, TOTAL											
Mercury	0.29	mg/kg		0.10		SW7471B	09/30/14 14:11 / rgk	09/29/14 13:18	HGCV201-H_140930A	78	26355
METAL, DRY WEIGHT											
Aluminum	26700	mg/kg-dry		7		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	266	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate #2 Sediment Sieve 1-2mm
Collection Date: 09/10/14 14:00
DateReceived: 09/12/14
Lab ID: H14090234-036
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Arsenic	31	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Barium	343	mg/kg-dry		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Cadmium	3.4	mg/kg-dry		0.4		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Chromium	8	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Copper	224	mg/kg-dry		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Iron	21000	mg/kg-dry		7		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Lead	80	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Manganese	844	mg/kg-dry		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:38 / dck	09/29/14 08:00	ICPMS204-B_140930A	: 225	26335
Vanadium	24	mg/kg-dry		2		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Zinc	596	mg/kg-dry		5		SW6010B	10/01/14 02:30 / sld	09/29/14 08:00	ICP2-HE_140930A	: 266	26335
Mercury	0.64	mg/kg-dry		0.10		SW7471B	09/30/14 14:11 / rgk	09/29/14 13:18	HGCV201-H_140930A	: 180	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Lab ID: H14090234-037
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	5.6	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	28	R101208
PHYSICAL CHARACTERISTICS											
Moisture	60.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	31	R101084
3050 EXTRACTABLE METALS											
Aluminum	13300	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Arsenic	15	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Barium	124	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Cadmium	2.7	mg/kg		0.2		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Chromium	57	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Copper	150	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Iron	13300	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Lead	87	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Manganese	464	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Nickel	28	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	35	26333
Vanadium	21	mg/kg		1		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
Zinc	456	mg/kg		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	95	26333
METALS, TOTAL											
Mercury	0.31	mg/kg		0.10		SW7471B	09/30/14 14:13 / rgk	09/29/14 13:18	HGCV201-H_140930A	79	26355
METAL, DRY WEIGHT											
Aluminum	33600	mg/kg-dry		9		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Lab ID: H14090234-037
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Arsenic	38	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Barium	316	mg/kg-dry		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Cadmium	6.7	mg/kg-dry		0.3		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Chromium	143	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Copper	381	mg/kg-dry		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Iron	33700	mg/kg-dry		8		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Lead	220	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Manganese	1180	mg/kg-dry		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Molybdenum	6	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Nickel	72	mg/kg-dry		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Uranium	5	mg/kg-dry		5		SW6020	09/30/14 14:34 / dck	09/29/14 08:00	ICPMS204-B_140930A	188	26333
Vanadium	54	mg/kg-dry		2		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Zinc	1160	mg/kg-dry		5		SW6010B	09/30/14 22:17 / sld	09/29/14 08:00	ICP2-HE_140930A	198	26333
Mercury	0.79	mg/kg-dry		0.10		SW7471B	09/30/14 14:13 / rgk	09/29/14 13:18	HGCV201-H_140930A	181	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Lab ID: H14090234-038
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	19.8	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	29	R101208
PHYSICAL CHARACTERISTICS											
Moisture	25.5	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	32	R101084
3050 EXTRACTABLE METALS											
Aluminum	3220	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Arsenic	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Barium	36	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Cadmium	0.7	mg/kg		0.2		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Chromium	5	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Copper	30	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Iron	8110	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Lead	10	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Manganese	95	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	68	26334
Vanadium	21	mg/kg		1		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
Zinc	94	mg/kg		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	125	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:16 / rgk	09/29/14 13:18	HGCV201-H_140930A	80	26355
METAL, DRY WEIGHT											
Aluminum	4320	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Collection Date: 09/10/14 13:00
DateReceived: 09/12/14
Lab ID: H14090234-038
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Barium	49	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Cadmium	0.9	mg/kg-dry		0.2		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Chromium	7	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Copper	40	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Iron	10900	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Lead	13	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Manganese	128	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	207	26334
Vanadium	28	mg/kg-dry		1		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Zinc	127	mg/kg-dry		5		SW6010B	10/01/14 00:08 / sld	09/29/14 08:00	ICP2-HE_140930A	228	26334
Mercury	0.11	mg/kg-dry		0.10		SW7471B	09/30/14 14:16 / rgk	09/29/14 13:18	HGCV201-H_140930A	182	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14090234-039
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	22.9	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	30	R101208
PHYSICAL CHARACTERISTICS											
Moisture	18.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	34	R101084
3050 EXTRACTABLE METALS											
Aluminum	2920	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Arsenic	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Barium	34	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Chromium	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Copper	20	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Iron	3680	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Lead	6	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Manganese	80	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	104	26335
Vanadium	6	mg/kg		1		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
Zinc	62	mg/kg		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	164	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:18 / rgk	09/29/14 13:18	HGCV201-H_140930A	81	26355
METAL, DRY WEIGHT											
Aluminum	3590	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14090234-039
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Barium	41	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Cadmium	0.6	mg/kg-dry		0.2		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Chromium	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Copper	25	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Iron	4530	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Lead	7	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Manganese	99	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 19:42 / dck	09/29/14 08:00	ICPMS204-B_140930A	226	26335
Vanadium	8	mg/kg-dry		1		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Zinc	76	mg/kg-dry		5		SW6010B	10/01/14 02:33 / sld	09/29/14 08:00	ICP2-HE_140930A	267	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 14:18 / rgk	09/29/14 13:18	HGCV201-H_140930A	183	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Lab ID: H14090234-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.0	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	31	R101208
PHYSICAL CHARACTERISTICS											
Moisture	72.7	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	35	R101084
3050 EXTRACTABLE METALS											
Aluminum	5780	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Arsenic	10	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Barium	100	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Cadmium	3.1	mg/kg		0.2		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Chromium	25	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Copper	115	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Iron	6770	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Lead	62	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Manganese	1220	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Nickel	15	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	36	26333
Vanadium	20	mg/kg		1		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
Zinc	532	mg/kg		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	96	26333
METALS, TOTAL											
Mercury	0.18	mg/kg		0.10		SW7471B	09/30/14 14:21 / rgk	09/29/14 13:18	HGCV201-H_140930A	82	26355
METAL, DRY WEIGHT											
Aluminum	21100	mg/kg-dry		10		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Lab ID: H14090234-040
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Arsenic	36	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Barium	367	mg/kg-dry		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Boron	ND	mg/kg-dry		20		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Cadmium	11.3	mg/kg-dry		0.6		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Chromium	93	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Copper	420	mg/kg-dry		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Iron	24800	mg/kg-dry		10		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Lead	228	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Manganese	4470	mg/kg-dry		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Molybdenum	5	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Nickel	54	mg/kg-dry		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Uranium	6	mg/kg-dry		5		SW6020	09/30/14 14:39 / dck	09/29/14 08:00	ICPMS204-B_140930A	189	26333
Vanadium	73	mg/kg-dry		3		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Zinc	1950	mg/kg-dry		5		SW6010B	09/30/14 22:21 / sld	09/29/14 08:00	ICP2-HE_140930A	199	26333
Mercury	0.65	mg/kg-dry		0.10		SW7471B	09/30/14 14:21 / rgk	09/29/14 13:18	HGCV201-H_140930A	184	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Lab ID: H14090234-041
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	16.8	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	32	R101208
PHYSICAL CHARACTERISTICS											
Moisture	18.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	36	R101084
3050 EXTRACTABLE METALS											
Aluminum	4020	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Arsenic	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Barium	78	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Cadmium	0.8	mg/kg		0.2		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Chromium	10	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Copper	28	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Iron	13200	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Lead	13	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Manganese	311	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	72	26334
Vanadium	40	mg/kg		1		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
Zinc	127	mg/kg		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	128	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:28 / rgk	09/29/14 13:18	HGCV201-H_140930A	85	26355
METAL, DRY WEIGHT											
Aluminum	4940	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Lab ID: H14090234-041
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Barium	96	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Cadmium	1.0	mg/kg-dry		0.2		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Chromium	12	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Copper	34	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Iron	16200	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Lead	16	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Manganese	382	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	208	26334
Vanadium	49	mg/kg-dry		1		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Zinc	157	mg/kg-dry		5		SW6010B	10/01/14 00:19 / sld	09/29/14 08:00	ICP2-HE_140930A	231	26334
Mercury	0.10	mg/kg-dry		0.10		SW7471B	09/30/14 14:28 / rgk	09/29/14 13:18	HGCV201-H_140930A	187	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14090234-042
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	26.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	33	R101208
PHYSICAL CHARACTERISTICS											
Moisture	14.8	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	37	R101084
3050 EXTRACTABLE METALS											
Aluminum	4030	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Arsenic	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Barium	75	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Cadmium	0.4	mg/kg		0.2		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Chromium	8	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Copper	14	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Iron	5220	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Lead	6	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Manganese	330	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	108	26335
Vanadium	11	mg/kg		1		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
Zinc	87	mg/kg		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	165	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:30 / rgk	09/29/14 13:18	HGCV201-H_140930A	86	26355
METAL, DRY WEIGHT											
Aluminum	4730	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14090234-042
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 12:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Barium	88	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Cadmium	0.5	mg/kg-dry		0.2		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Chromium	9	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Copper	17	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Iron	6130	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Lead	7	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Manganese	388	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	227	26335
Vanadium	13	mg/kg-dry		1		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Zinc	102	mg/kg-dry		5		SW6010B	10/01/14 02:37 / sld	09/29/14 08:00	ICP2-HE_140930A	268	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 14:30 / rgk	09/29/14 13:18	HGCV201-H_140930A	188	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Lab ID: H14090234-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.9	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	34	R101208
PHYSICAL CHARACTERISTICS											
Moisture	71.0	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	38	R101084
3050 EXTRACTABLE METALS											
Aluminum	7700	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Arsenic	13	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Barium	105	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Cadmium	2.1	mg/kg		0.2		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Chromium	16	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Copper	99	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Iron	7750	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Lead	72	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Manganese	425	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Nickel	9	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	37	26333
Vanadium	18	mg/kg		1		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
Zinc	367	mg/kg		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	97	26333
METALS, TOTAL											
Mercury	0.18	mg/kg		0.10		SW7471B	09/30/14 14:40 / rgk	09/29/14 13:18	HGCV201-H_140930A	90	26355
METAL, DRY WEIGHT											
Aluminum	26600	mg/kg-dry		10		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Collection Date: 09/10/14 11:00
DateReceived: 09/12/14
Lab ID: H14090234-043
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Arsenic	44	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Barium	362	mg/kg-dry		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Boron	ND	mg/kg-dry		20		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Cadmium	7.2	mg/kg-dry		0.5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Chromium	57	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Copper	343	mg/kg-dry		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Iron	26700	mg/kg-dry		10		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Lead	248	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Manganese	1470	mg/kg-dry		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Molybdenum	6	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Nickel	32	mg/kg-dry		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Uranium	9	mg/kg-dry		5		SW6020	09/30/14 14:43 / dck	09/29/14 08:00	ICPMS204-B_140930A	190	26333
Vanadium	64	mg/kg-dry		3		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Zinc	1260	mg/kg-dry		5		SW6010B	09/30/14 22:25 / sld	09/29/14 08:00	ICP2-HE_140930A	200	26333
Mercury	0.62	mg/kg-dry		0.10		SW7471B	09/30/14 14:40 / rgk	09/29/14 13:18	HGCV201-H_140930A	192	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Lab ID: H14090234-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	28.1	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	35	R101208
PHYSICAL CHARACTERISTICS											
Moisture	23.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	39	R101084
3050 EXTRACTABLE METALS											
Aluminum	3920	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Arsenic	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Barium	89	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Chromium	9	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Copper	20	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Iron	7480	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Lead	12	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Manganese	126	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Molybdenum	9	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	73	26334
Vanadium	20	mg/kg		1		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
Zinc	81	mg/kg		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	129	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:42 / rgk	09/29/14 13:18	HGCV201-H_140930A	91	26355
METAL, DRY WEIGHT											
Aluminum	5130	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Lab ID: H14090234-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Barium	117	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Cadmium	0.7	mg/kg-dry		0.2		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Chromium	11	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Copper	27	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Iron	9790	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Lead	16	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Manganese	164	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Molybdenum	12	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Nickel	5	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	209	26334
Vanadium	26	mg/kg-dry		1		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Zinc	106	mg/kg-dry		5		SW6010B	10/01/14 00:23 / sld	09/29/14 08:00	ICP2-HE_140930A	232	26334
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 14:42 / rgk	09/29/14 13:18	HGCV201-H_140930A	193	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14090234-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	23.0	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	36	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.4	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	40	R101084
3050 EXTRACTABLE METALS											
Aluminum	3930	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Arsenic	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Barium	89	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Cadmium	0.3	mg/kg		0.2		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Chromium	7	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Copper	19	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Iron	5700	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Lead	9	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Manganese	144	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	109	26335
Vanadium	11	mg/kg		1		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
Zinc	60	mg/kg		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	166	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:45 / rgk	09/29/14 13:18	HGCV201-H_140930A	92	26355
METAL, DRY WEIGHT											
Aluminum	5000	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14090234-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Arsenic	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Barium	113	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Cadmium	0.4	mg/kg-dry		0.2		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Chromium	9	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Copper	24	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Iron	7250	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Lead	12	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Manganese	183	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Nickel	5	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:04 / dck	09/29/14 08:00	ICPMS204-B_140930A	228	26335
Vanadium	14	mg/kg-dry		1		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Zinc	76	mg/kg-dry		5		SW6010B	10/01/14 02:41 / sld	09/29/14 08:00	ICP2-HE_140930A	269	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 14:45 / rgk	09/29/14 13:18	HGCV201-H_140930A	194	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14090234-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.7	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	37	R101208
PHYSICAL CHARACTERISTICS											
Moisture	74.3	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	41	R101084
3050 EXTRACTABLE METALS											
Aluminum	8070	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Arsenic	9	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Barium	122	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Cadmium	2.7	mg/kg		0.2		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Chromium	11	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Copper	127	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Iron	8330	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Lead	40	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Manganese	795	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Nickel	7	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	38	26333
Vanadium	22	mg/kg		1		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
Zinc	472	mg/kg		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	98	26333
METALS, TOTAL											
Mercury	0.20	mg/kg		0.10		SW7471B	09/30/14 14:47 / rgk	09/29/14 13:18	HGCV201-H_140930A	93	26355
METAL, DRY WEIGHT											
Aluminum	31300	mg/kg-dry		10		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14090234-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Arsenic	37	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Barium	473	mg/kg-dry		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Boron	ND	mg/kg-dry		20		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Cadmium	10.6	mg/kg-dry		0.6		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Chromium	43	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Copper	493	mg/kg-dry		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Iron	32300	mg/kg-dry		10		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Lead	156	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Manganese	3090	mg/kg-dry		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Nickel	26	mg/kg-dry		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Uranium	6	mg/kg-dry		5		SW6020	09/30/14 14:47 / dck	09/29/14 08:00	ICPMS204-B_140930A	191	26333
Vanadium	87	mg/kg-dry		3		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Zinc	1830	mg/kg-dry		5		SW6010B	09/30/14 22:28 / sld	09/29/14 08:00	ICP2-HE_140930A	201	26333
Mercury	0.78	mg/kg-dry		0.10		SW7471B	09/30/14 14:47 / rgk	09/29/14 13:18	HGCV201-H_140930A	195	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14090234-047
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	27.3	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	38	R101208
PHYSICAL CHARACTERISTICS											
Moisture	27.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	42	R101084
3050 EXTRACTABLE METALS											
Aluminum	4240	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Arsenic	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Barium	114	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Chromium	9	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Copper	30	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Iron	8040	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Lead	12	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Manganese	263	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	74	26334
Vanadium	22	mg/kg		1		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
Zinc	95	mg/kg		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	130	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:49 / rgk	09/29/14 13:18	HGCV201-H_140930A	94	26355
METAL, DRY WEIGHT											
Aluminum	5820	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14090234-047
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Arsenic	5	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Barium	157	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Cadmium	0.7	mg/kg-dry		0.2		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Chromium	13	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Copper	41	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Iron	11000	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Lead	16	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Manganese	361	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Nickel	5	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	210	26334
Vanadium	30	mg/kg-dry		1		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Zinc	131	mg/kg-dry		5		SW6010B	10/01/14 00:27 / sld	09/29/14 08:00	ICP2-HE_140930A	233	26334
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 14:49 / rgk	09/29/14 13:18	HGCV201-H_140930A	196	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14090234-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	18.2	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	39	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	44	R101084
3050 EXTRACTABLE METALS											
Aluminum	3440	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Arsenic	5	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Barium	89	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Cadmium	0.3	mg/kg		0.2		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Chromium	9	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Copper	21	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Iron	5410	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Lead	8	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Manganese	298	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	110	26335
Vanadium	10	mg/kg		1		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
Zinc	75	mg/kg		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	167	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 14:52 / rgk	09/29/14 13:18	HGCV201-H_140930A	95	26355
METAL, DRY WEIGHT											
Aluminum	4390	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14090234-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/10/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Arsenic	7	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Barium	114	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Cadmium	0.4	mg/kg-dry		0.2		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Chromium	12	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Copper	27	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Iron	6900	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Lead	10	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Manganese	381	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Nickel	6	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:09 / dck	09/29/14 08:00	ICPMS204-B_140930A	229	26335
Vanadium	13	mg/kg-dry		1		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Zinc	95	mg/kg-dry		5		SW6010B	10/01/14 02:45 / sld	09/29/14 08:00	ICP2-HE_140930A	270	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 14:52 / rgk	09/29/14 13:18	HGCV201-H_140930A	197	26355

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Lab ID: H14090234-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	8.7	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	40	R101208
PHYSICAL CHARACTERISTICS											
Moisture	76.8	wt%	H	0.2		D2974	10/08/14 07:36 / sld		DRYING OVEN 2_141007A	1	R101219
3050 EXTRACTABLE METALS											
Aluminum	11600	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Antimony	ND	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Arsenic	10	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Barium	111	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Beryllium	ND	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Boron	6	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Cadmium	1.7	mg/kg		0.2		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Chromium	11	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Cobalt	ND	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Copper	98	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Iron	11100	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Lead	37	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Manganese	674	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Molybdenum	ND	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Nickel	7	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Selenium	ND	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Silver	ND	mg/kg		5		SW6020	10/10/14 11:58 / dck	10/07/14 15:55	ICPMS204-B_141010A	19	26463
Uranium	ND	mg/kg		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	24	26463
Vanadium	24	mg/kg		1		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
Zinc	408	mg/kg		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	22	26463
METALS, TOTAL											
Mercury	0.20	mg/kg	H	0.10		SW7471B	10/09/14 09:42 / sbk	10/08/14 11:00	HGCV201-H_141009A	7	26472
METAL, DRY WEIGHT											
Aluminum	49900	mg/kg-dry		10		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463

Report Definitions:
RL - Analyte reporting limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Lab ID: H14090234-049
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Arsenic	42	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Barium	477	mg/kg-dry		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Beryllium	ND	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Boron	24	mg/kg-dry		20		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Cadmium	7.1	mg/kg-dry		0.6		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Chromium	48	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Cobalt	14	mg/kg-dry		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Copper	420	mg/kg-dry		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Iron	47700	mg/kg-dry		10		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Lead	158	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Manganese	2900	mg/kg-dry		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Molybdenum	ND	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Nickel	29	mg/kg-dry		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Selenium	ND	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Silver	ND	mg/kg-dry		5		SW6020	10/10/14 11:58 / dck	10/07/14 15:55	ICPMS204-B_141010A	47	26463
Uranium	5	mg/kg-dry		5		SW6020	10/09/14 14:28 / dck	10/07/14 15:55	ICPMS204-B_141009B	79	26463
Vanadium	104	mg/kg-dry		3		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Zinc	1760	mg/kg-dry		5		SW6010B	10/09/14 11:55 / sld	10/07/14 15:55	ICP2-HE_141009B	209	26463
Mercury	0.85	mg/kg-dry	H	0.10		SW7471B	10/09/14 09:42 / sbk	09/29/14 13:17	HGCV201-H_141009A	21	26472

Report Definitions:
RL - Analyte reporting limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
H - Analysis performed past recommended holding time.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14090234-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	35.8	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	41	R101208
PHYSICAL CHARACTERISTICS											
Moisture	20.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	45	R101084
3050 EXTRACTABLE METALS											
Aluminum	4730	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Arsenic	5	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Barium	128	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Cadmium	0.6	mg/kg		0.2		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Chromium	12	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Copper	26	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Iron	15300	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Lead	13	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Manganese	356	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	75	26334
Vanadium	43	mg/kg		1		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
Zinc	184	mg/kg		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	131	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 10:37 / rgk	09/29/14 13:17	HGCV201-H_140930A	9	26354
METAL, DRY WEIGHT											
Aluminum	5980	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14090234-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Arsenic	7	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Barium	162	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Cadmium	0.8	mg/kg-dry		0.2		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Chromium	15	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Copper	33	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Iron	19300	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Lead	16	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Manganese	450	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Nickel	6	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:35 / dck	09/29/14 08:00	ICPMS204-B_140930A	211	26334
Vanadium	55	mg/kg-dry		1		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Zinc	232	mg/kg-dry		5		SW6010B	10/01/14 00:31 / sld	09/29/14 08:00	ICP2-HE_140930A	234	26334
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 10:37 / rgk	09/29/14 13:17	HGCV201-H_140930A	111	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14090234-051
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	19.2	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	42	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	46	R101084
3050 EXTRACTABLE METALS											
Aluminum	3510	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Arsenic	6	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Barium	99	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Cadmium	0.5	mg/kg		0.2		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Chromium	6	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Copper	56	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Iron	5440	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Lead	116	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Manganese	1200	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Nickel	ND	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	111	26335
Vanadium	15	mg/kg		1		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
Zinc	373	mg/kg		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	168	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 10:47 / rgk	09/29/14 13:17	HGCV201-H_140930A	13	26354
METAL, DRY WEIGHT											
Aluminum	4480	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14090234-051
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 18:45
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Arsenic	8	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Barium	127	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Cadmium	0.7	mg/kg-dry		0.2		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Chromium	7	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Copper	72	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Iron	6930	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Lead	148	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Manganese	1540	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:13 / dck	09/29/14 08:00	ICPMS204-B_140930A	230	26335
Vanadium	20	mg/kg-dry		1		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Zinc	476	mg/kg-dry		5		SW6010B	10/01/14 02:48 / sld	09/29/14 08:00	ICP2-HE_140930A	271	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 10:47 / rgk	09/29/14 13:17	HGCV201-H_140930A	115	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14090234-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.4	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	43	R101208
PHYSICAL CHARACTERISTICS											
Moisture	62.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	47	R101084
3050 EXTRACTABLE METALS											
Aluminum	9630	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Arsenic	72	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Barium	188	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Cadmium	6.1	mg/kg		0.2		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Chromium	19	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Copper	755	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Iron	15200	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Lead	267	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Manganese	1190	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Nickel	10	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	40	26333
Vanadium	34	mg/kg		1		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
Zinc	994	mg/kg		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	100	26333
METALS, TOTAL											
Mercury	1.6	mg/kg		0.10		SW7471B	09/30/14 11:17 / rgk	09/29/14 13:17	HGCV201-H_140930A	20	26354
METAL, DRY WEIGHT											
Aluminum	25500	mg/kg-dry		9		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14090234-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Arsenic	192	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Barium	496	mg/kg-dry		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Cadmium	16.1	mg/kg-dry		0.4		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Chromium	50	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Copper	2000	mg/kg-dry		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Iron	40300	mg/kg-dry		8		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Lead	706	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Manganese	3140	mg/kg-dry		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Molybdenum	5	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Nickel	27	mg/kg-dry		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Silver	9	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Uranium	7	mg/kg-dry		5		SW6020	09/30/14 14:56 / dck	09/29/14 08:00	ICPMS204-B_140930A	193	26333
Vanadium	89	mg/kg-dry		2		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Zinc	2630	mg/kg-dry		5		SW6010B	09/30/14 22:36 / sld	09/29/14 08:00	ICP2-HE_140930A	203	26333
Mercury	4.2	mg/kg-dry		0.13		SW7471B	09/30/14 11:17 / rgk	09/29/14 13:17	HGCV201-H_140930A	122	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Lab ID: H14090234-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	40.5	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	44	R101208
PHYSICAL CHARACTERISTICS											
Moisture	20.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	48	R101084
3050 EXTRACTABLE METALS											
Aluminum	3320	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Arsenic	64	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Barium	73	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Cadmium	2.8	mg/kg		0.2		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Chromium	23	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Copper	288	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Iron	38400	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Lead	205	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Manganese	524	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Nickel	6	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	76	26334
Vanadium	106	mg/kg		1		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
Zinc	851	mg/kg		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	132	26334
METALS, TOTAL											
Mercury	0.59	mg/kg		0.10		SW7471B	09/30/14 11:19 / rgk	09/29/14 13:17	HGCV201-H_140930A	21	26354
METAL, DRY WEIGHT											
Aluminum	4190	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Lab ID: H14090234-053
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Arsenic	80	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Barium	92	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Cadmium	3.5	mg/kg-dry		0.2		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Chromium	29	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Copper	362	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Iron	48400	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Lead	258	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Manganese	660	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Nickel	7	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Uranium	6	mg/kg-dry		5		SW6020	09/30/14 17:40 / dck	09/29/14 08:00	ICPMS204-B_140930A	212	26334
Vanadium	133	mg/kg-dry		1		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Zinc	1070	mg/kg-dry		5		SW6010B	10/01/14 00:34 / sld	09/29/14 08:00	ICP2-HE_140930A	235	26334
Mercury	0.75	mg/kg-dry		0.10		SW7471B	09/30/14 11:19 / rgk	09/29/14 13:17	HGCV201-H_140930A	123	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14090234-054
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	22.5	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	45	R101208
PHYSICAL CHARACTERISTICS											
Moisture	14.6	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	49	R101084
3050 EXTRACTABLE METALS											
Aluminum	3480	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Arsenic	195	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Barium	99	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Cadmium	6.2	mg/kg		0.2		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Chromium	9	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Cobalt	ND	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Copper	941	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Iron	18700	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Lead	109	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Manganese	772	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Molybdenum	5	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Nickel	ND	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Silver	6	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	112	26335
Vanadium	24	mg/kg		1		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
Zinc	2450	mg/kg		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	18	26335
METALS, TOTAL											
Mercury	0.27	mg/kg		0.10		SW7471B	09/30/14 11:21 / rgk	09/29/14 13:17	HGCV201-H_140930A	22	26354
METAL, DRY WEIGHT											
Aluminum	4080	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14090234-054
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 16:30
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Arsenic	228	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Barium	116	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Cadmium	7.3	mg/kg-dry		0.2		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Chromium	10	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Copper	1100	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Iron	21900	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Lead	127	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Manganese	904	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Molybdenum	6	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Silver	7	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:18 / dck	09/29/14 08:00	ICPMS204-B_140930A	231	26335
Vanadium	28	mg/kg-dry		1		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Zinc	2870	mg/kg-dry		5		SW6010B	10/02/14 09:56 / sld	09/29/14 08:00	ICP2-HE_141002A	81	26335
Mercury	0.32	mg/kg-dry		0.10		SW7471B	09/30/14 11:21 / rgk	09/29/14 13:17	HGCV201-H_140930A	124	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14090234-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.1	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	46	R101208
PHYSICAL CHARACTERISTICS											
Moisture	55.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	50	R101084
3050 EXTRACTABLE METALS											
Aluminum	10200	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Arsenic	107	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Barium	173	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Cadmium	4.4	mg/kg		0.2		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Chromium	58	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Copper	399	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Iron	23200	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Lead	219	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Manganese	798	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Nickel	29	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	41	26333
Vanadium	37	mg/kg		1		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
Zinc	1350	mg/kg		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	101	26333
METALS, TOTAL											
Mercury	0.78	mg/kg		0.10		SW7471B	09/30/14 11:28 / rgk	09/29/14 13:17	HGCV201-H_140930A	23	26354
METAL, DRY WEIGHT											
Aluminum	22700	mg/kg-dry		7		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Lab ID: H14090234-055
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Arsenic	238	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Barium	386	mg/kg-dry		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Boron	ND	mg/kg-dry		9		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Cadmium	9.9	mg/kg-dry		0.3		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Chromium	129	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Cobalt	5	mg/kg-dry		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Copper	889	mg/kg-dry		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Iron	51700	mg/kg-dry		6		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Lead	489	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Manganese	1780	mg/kg-dry		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Molybdenum	8	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Nickel	65	mg/kg-dry		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Uranium	7	mg/kg-dry		5		SW6020	09/30/14 15:00 / dck	09/29/14 08:00	ICPMS204-B_140930A	194	26333
Vanadium	82	mg/kg-dry		2		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Zinc	3000	mg/kg-dry		5		SW6010B	09/30/14 22:39 / sld	09/29/14 08:00	ICP2-HE_140930A	204	26333
Mercury	1.7	mg/kg-dry		0.11		SW7471B	09/30/14 11:28 / rgk	09/29/14 13:17	HGCV201-H_140930A	125	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Lab ID: H14090234-056
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	29.2	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	47	R101208
PHYSICAL CHARACTERISTICS											
Moisture	18.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	51	R101084
3050 EXTRACTABLE METALS											
Aluminum	4340	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Arsenic	56	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Barium	76	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Cadmium	1.3	mg/kg		0.2		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Chromium	24	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Copper	139	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Iron	33600	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Lead	50	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Manganese	289	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Nickel	7	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Uranium	7	mg/kg		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	77	26334
Vanadium	103	mg/kg		1		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
Zinc	537	mg/kg		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	133	26334
METALS, TOTAL											
Mercury	0.28	mg/kg		0.10		SW7471B	09/30/14 11:31 / rgk	09/29/14 13:17	HGCV201-H_140930A	24	26354
METAL, DRY WEIGHT											
Aluminum	5350	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Lab ID: H14090234-056
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Arsenic	69	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Barium	94	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Cadmium	1.6	mg/kg-dry		0.2		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Chromium	30	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Copper	172	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Iron	41500	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Lead	61	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Manganese	356	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Nickel	8	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Uranium	8	mg/kg-dry		5		SW6020	09/30/14 17:44 / dck	09/29/14 08:00	ICPMS204-B_140930A	213	26334
Vanadium	127	mg/kg-dry		1		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Zinc	662	mg/kg-dry		5		SW6010B	10/01/14 00:38 / sld	09/29/14 08:00	ICP2-HE_140930A	236	26334
Mercury	0.35	mg/kg-dry		0.10		SW7471B	09/30/14 11:31 / rgk	09/29/14 13:17	HGCV201-H_140930A	126	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14090234-057
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	41.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	48	R101208
PHYSICAL CHARACTERISTICS											
Moisture	15.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	53	R101084
3050 EXTRACTABLE METALS											
Aluminum	5370	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Arsenic	43	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Barium	83	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Cadmium	1.3	mg/kg		0.2		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Chromium	14	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Cobalt	ND	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Copper	116	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Iron	12000	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Lead	35	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Manganese	401	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Nickel	8	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	113	26335
Vanadium	22	mg/kg		1		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
Zinc	500	mg/kg		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	19	26335
METALS, TOTAL											
Mercury	0.28	mg/kg		0.10		SW7471B	09/30/14 11:33 / rgk	09/29/14 13:17	HGCV201-H_140930A	25	26354
METAL, DRY WEIGHT											
Aluminum	6340	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14090234-057
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 15:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Arsenic	51	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Barium	98	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Cadmium	1.5	mg/kg-dry		0.2		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Chromium	17	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Copper	137	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Iron	14200	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Lead	41	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Manganese	473	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Nickel	9	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:22 / dck	09/29/14 08:00	ICPMS204-B_140930A	232	26335
Vanadium	26	mg/kg-dry		1		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Zinc	590	mg/kg-dry		5		SW6010B	10/02/14 10:00 / sld	09/29/14 08:00	ICP2-HE_141002A	82	26335
Mercury	0.34	mg/kg-dry		0.10		SW7471B	09/30/14 11:33 / rgk	09/29/14 13:17	HGCV201-H_140930A	127	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14090234-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.6	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	49	R101208
PHYSICAL CHARACTERISTICS											
Moisture	62.2	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	54	R101084
3050 EXTRACTABLE METALS											
Aluminum	10200	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Arsenic	35	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Barium	110	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Cadmium	3.7	mg/kg		0.2		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Chromium	16	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Copper	312	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Iron	13500	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Lead	162	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Manganese	1370	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Nickel	8	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	42	26333
Vanadium	35	mg/kg		1		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
Zinc	740	mg/kg		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	104	26333
METALS, TOTAL											
Mercury	0.86	mg/kg		0.10		SW7471B	09/30/14 15:01 / rgk	09/29/14 13:17	HGCV201-H_140930A	98	26354
METAL, DRY WEIGHT											
Aluminum	27000	mg/kg-dry		9		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14090234-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Arsenic	93	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Barium	292	mg/kg-dry		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Cadmium	9.9	mg/kg-dry		0.4		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Chromium	41	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Cobalt	ND	mg/kg-dry		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Copper	825	mg/kg-dry		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Iron	35600	mg/kg-dry		8		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Lead	428	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Manganese	3630	mg/kg-dry		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Nickel	21	mg/kg-dry		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 15:05 / dck	09/29/14 08:00	ICPMS204-B_140930A	195	26333
Vanadium	92	mg/kg-dry		2		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Zinc	1960	mg/kg-dry		5		SW6010B	09/30/14 22:50 / sld	09/29/14 08:00	ICP2-HE_140930A	207	26333
Mercury	2.3	mg/kg-dry		0.13		SW7471B	09/30/14 15:01 / rgk	09/29/14 13:17	HGCV201-H_140930A	200	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Lab ID: H14090234-059
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	72.6	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	50	R101208
PHYSICAL CHARACTERISTICS											
Moisture	21.4	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	55	R101084
3050 EXTRACTABLE METALS											
Aluminum	4590	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Arsenic	27	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Barium	85	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Cadmium	0.7	mg/kg		0.2		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Chromium	12	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Copper	103	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Iron	17000	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Lead	64	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Manganese	552	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	78	26334
Vanadium	46	mg/kg		1		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
Zinc	293	mg/kg		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	134	26334
METALS, TOTAL											
Mercury	0.26	mg/kg		0.10		SW7471B	09/30/14 13:14 / rgk	09/29/14 13:17	HGCV201-H_140930A	54	26354
METAL, DRY WEIGHT											
Aluminum	5850	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Collection Date: 09/09/14 13:00
DateReceived: 09/12/14
Lab ID: H14090234-059
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Arsenic	34	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Barium	108	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Cadmium	0.8	mg/kg-dry		0.2		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Chromium	15	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Copper	131	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Iron	21700	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Lead	81	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Manganese	702	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Nickel	6	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:49 / dck	09/29/14 08:00	ICPMS204-B_140930A	214	26334
Vanadium	59	mg/kg-dry		1		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Zinc	372	mg/kg-dry		5		SW6010B	10/01/14 00:42 / sld	09/29/14 08:00	ICP2-HE_140930A	237	26334
Mercury	0.33	mg/kg-dry		0.10		SW7471B	09/30/14 13:14 / rgk	09/29/14 13:17	HGCV201-H_140930A	156	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14090234-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	9.4	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	51	R101208
PHYSICAL CHARACTERISTICS											
Moisture	19.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	56	R101084
3050 EXTRACTABLE METALS											
Aluminum	3180	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Arsenic	19	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Barium	82	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Cadmium	0.4	mg/kg		0.2		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Chromium	6	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Cobalt	ND	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Copper	93	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Iron	7600	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Lead	29	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Manganese	420	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Nickel	ND	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	114	26335
Vanadium	15	mg/kg		1		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
Zinc	208	mg/kg		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	20	26335
METALS, TOTAL											
Mercury	0.16	mg/kg		0.10		SW7471B	09/30/14 13:16 / rgk	09/29/14 13:17	HGCV201-H_140930A	55	26354
METAL, DRY WEIGHT											
Aluminum	3970	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14090234-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 13:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Arsenic	23	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Barium	103	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Cadmium	0.5	mg/kg-dry		0.2		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Chromium	7	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Copper	116	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Iron	9490	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Lead	37	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Manganese	525	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:26 / dck	09/29/14 08:00	ICPMS204-B_140930A	233	26335
Vanadium	18	mg/kg-dry		1		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Zinc	260	mg/kg-dry		5		SW6010B	10/02/14 10:04 / sld	09/29/14 08:00	ICP2-HE_141002A	83	26335
Mercury	0.20	mg/kg-dry		0.10		SW7471B	09/30/14 13:16 / rgk	09/29/14 13:17	HGCV201-H_140930A	157	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14090234-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	0.9	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	52	R101208
PHYSICAL CHARACTERISTICS											
Moisture	62.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	57	R101084
3050 EXTRACTABLE METALS											
Aluminum	9100	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Arsenic	31	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Barium	149	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Cadmium	6.3	mg/kg		0.2		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Chromium	25	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Copper	421	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Iron	15700	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Lead	109	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Manganese	1900	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Nickel	13	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	46	26333
Vanadium	45	mg/kg		1		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
Zinc	803	mg/kg		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	105	26333
METALS, TOTAL											
Mercury	0.55	mg/kg		0.10		SW7471B	09/30/14 13:26 / rgk	09/29/14 13:17	HGCV201-H_140930A	59	26354
METAL, DRY WEIGHT											
Aluminum	24500	mg/kg-dry		8		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14090234-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Arsenic	83	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Barium	402	mg/kg-dry		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Cadmium	17.0	mg/kg-dry		0.4		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Chromium	66	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Cobalt	6	mg/kg-dry		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Copper	1130	mg/kg-dry		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Iron	42300	mg/kg-dry		7		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Lead	295	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Manganese	5120	mg/kg-dry		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Molybdenum	6	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Nickel	35	mg/kg-dry		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 15:27 / dck	09/29/14 08:00	ICPMS204-B_140930A	196	26333
Vanadium	122	mg/kg-dry		2		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Zinc	2160	mg/kg-dry		5		SW6010B	09/30/14 22:54 / sld	09/29/14 08:00	ICP2-HE_140930A	208	26333
Mercury	0.30	mg/kg-dry		0.10		SW7471B	09/30/14 13:26 / rgk	09/29/14 13:17	HGCV201-H_140930A	161	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Lab ID: H14090234-062
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	54.2	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	53	R101208
PHYSICAL CHARACTERISTICS											
Moisture	20.3	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	58	R101084
3050 EXTRACTABLE METALS											
Aluminum	2510	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Arsenic	15	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Barium	56	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Cadmium	0.8	mg/kg		0.2		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Chromium	15	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Copper	61	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Iron	21800	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Lead	24	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Manganese	562	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	79	26334
Vanadium	71	mg/kg		1		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
Zinc	238	mg/kg		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	135	26334
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 13:28 / rgk	09/29/14 13:17	HGCV201-H_140930A	60	26354
METAL, DRY WEIGHT											
Aluminum	3150	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Collection Date: 09/09/14 11:00
DateReceived: 09/12/14
Lab ID: H14090234-062
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Arsenic	19	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Barium	70	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Cadmium	1.0	mg/kg-dry		0.2		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Chromium	18	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Copper	76	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Iron	27400	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Lead	30	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Manganese	705	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 17:53 / dck	09/29/14 08:00	ICPMS204-B_140930A	215	26334
Vanadium	89	mg/kg-dry		1		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Zinc	299	mg/kg-dry		5		SW6010B	10/01/14 00:46 / sld	09/29/14 08:00	ICP2-HE_140930A	238	26334
Mercury	0.11	mg/kg-dry		0.10		SW7471B	09/30/14 13:28 / rgk	09/29/14 13:17	HGCV201-H_140930A	162	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14090234-063
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00 **DateReceived:** 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	37.2	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	54	R101208
PHYSICAL CHARACTERISTICS											
Moisture	17.9	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	59	R101084
3050 EXTRACTABLE METALS											
Aluminum	3010	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Arsenic	21	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Barium	74	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Cadmium	0.4	mg/kg		0.2		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Chromium	7	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Cobalt	ND	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Copper	68	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Iron	6650	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Lead	16	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Manganese	528	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Nickel	ND	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	115	26335
Vanadium	16	mg/kg		1		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
Zinc	144	mg/kg		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	21	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 13:30 / rgk	09/29/14 13:17	HGCV201-H_140930A	61	26354
METAL, DRY WEIGHT											
Aluminum	3660	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14090234-063
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 11:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Arsenic	26	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Barium	90	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Cadmium	0.5	mg/kg-dry		0.2		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Chromium	8	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Copper	83	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Iron	8100	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Lead	20	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Manganese	643	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	234	26335
Vanadium	19	mg/kg-dry		1		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Zinc	175	mg/kg-dry		5		SW6010B	10/02/14 10:07 / sld	09/29/14 08:00	ICP2-HE_141002A	84	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 13:30 / rgk	09/29/14 13:17	HGCV201-H_140930A	163	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve <0.065mm
Lab ID: H14090234-064
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.8	wt% passed		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	55	R101208
PHYSICAL CHARACTERISTICS											
Moisture	53.5	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	60	R101084
3050 EXTRACTABLE METALS											
Aluminum	10500	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Antimony	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Arsenic	37	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Barium	131	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Beryllium	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Boron	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Cadmium	5.7	mg/kg		0.2		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Chromium	22	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Cobalt	ND	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Copper	317	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Iron	16700	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Lead	131	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Manganese	1110	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Nickel	11	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Selenium	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Silver	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Uranium	ND	mg/kg		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	47	26333
Vanadium	43	mg/kg		1		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
Zinc	954	mg/kg		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	106	26333
METALS, TOTAL											
Mercury	0.60	mg/kg		0.10		SW7471B	09/30/14 13:33 / rgk	09/29/14 13:17	HGCV201-H_140930A	62	26354
METAL, DRY WEIGHT											
Aluminum	22700	mg/kg-dry		8		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-19 Sediment Sieve <0.065mm
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Lab ID: H14090234-064
Report Date: 10/16/14
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Arsenic	80	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Barium	283	mg/kg-dry		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Boron	ND	mg/kg-dry		10		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Cadmium	12.2	mg/kg-dry		0.4		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Chromium	47	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Cobalt	7	mg/kg-dry		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Copper	682	mg/kg-dry		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Iron	35900	mg/kg-dry		7		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Lead	282	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Manganese	2390	mg/kg-dry		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Nickel	24	mg/kg-dry		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Uranium	6	mg/kg-dry		5		SW6020	09/30/14 15:31 / dck	09/29/14 08:00	ICPMS204-B_140930A	197	26333
Vanadium	92	mg/kg-dry		2		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Zinc	2050	mg/kg-dry		5		SW6010B	09/30/14 22:58 / sld	09/29/14 08:00	ICP2-HE_140930A	209	26333
Mercury	0.26	mg/kg-dry		0.10		SW7471B	09/30/14 13:33 / rgk	09/29/14 13:17	HGCV201-H_140930A	164	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 0.065-1mm
Lab ID: H14090234-065
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	17.5	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	56	R101208
PHYSICAL CHARACTERISTICS											
Moisture	20.4	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	61	R101084
3050 EXTRACTABLE METALS											
Aluminum	3830	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Antimony	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Arsenic	32	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Barium	90	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Beryllium	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Boron	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Cadmium	0.8	mg/kg		0.2		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Chromium	9	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Cobalt	ND	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Copper	65	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Iron	9110	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Lead	95	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Manganese	301	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Nickel	ND	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Selenium	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Silver	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Uranium	ND	mg/kg		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	83	26334
Vanadium	24	mg/kg		1		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
Zinc	282	mg/kg		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	136	26334
METALS, TOTAL											
Mercury	0.12	mg/kg		0.10		SW7471B	09/30/14 13:35 / rgk	09/29/14 13:17	HGCV201-H_140930A	63	26354
METAL, DRY WEIGHT											
Aluminum	4810	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 0.065-1mm
Lab ID: H14090234-065
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Arsenic	41	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Barium	113	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Boron	ND	mg/kg-dry		6		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Cadmium	1.0	mg/kg-dry		0.2		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Chromium	11	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Cobalt	ND	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Copper	82	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Iron	11400	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Lead	119	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Manganese	378	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Nickel	ND	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 18:11 / dck	09/29/14 08:00	ICPMS204-B_140930A	216	26334
Vanadium	30	mg/kg-dry		1		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Zinc	354	mg/kg-dry		5		SW6010B	10/01/14 00:49 / sld	09/29/14 08:00	ICP2-HE_140930A	239	26334
Mercury	0.15	mg/kg-dry		0.10		SW7471B	09/30/14 13:35 / rgk	09/29/14 13:17	HGCV201-H_140930A	165	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 1-2mm
Lab ID: H14090234-066
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	50.9	wt% retained		0.1		ASA15-2	09/29/14 08:11 / edp		MISC SOILS_140929E	57	R101208
PHYSICAL CHARACTERISTICS											
Moisture	16.0	wt%		0.2		D2974	10/03/14 08:37 / sld		RYING OVEN 2_141002A	63	R101084
3050 EXTRACTABLE METALS											
Aluminum	4020	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Antimony	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Arsenic	14	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Barium	95	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Beryllium	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Boron	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Cadmium	0.3	mg/kg		0.2		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Chromium	8	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Cobalt	ND	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Copper	49	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Iron	6970	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Lead	18	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Manganese	364	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Molybdenum	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Nickel	ND	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Selenium	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Silver	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Uranium	ND	mg/kg		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	119	26335
Vanadium	17	mg/kg		1		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
Zinc	127	mg/kg		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	22	26335
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	09/30/14 13:38 / rgk	09/29/14 13:17	HGCV201-H_140930A	64	26354
METAL, DRY WEIGHT											
Aluminum	4780	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19 Sediment Sieve 1-2mm
Lab ID: H14090234-066
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 09/09/14 09:00
DateReceived: 09/12/14
Report Date: 10/16/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Arsenic	17	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Barium	113	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Beryllium	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Boron	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Cadmium	0.3	mg/kg-dry		0.2		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Chromium	10	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Cobalt	ND	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Copper	59	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Iron	8300	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Lead	22	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Manganese	433	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Molybdenum	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Nickel	ND	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Selenium	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Silver	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Uranium	ND	mg/kg-dry		5		SW6020	09/30/14 20:48 / dck	09/29/14 08:00	ICPMS204-B_140930A	235	26335
Vanadium	20	mg/kg-dry		1		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Zinc	151	mg/kg-dry		5		SW6010B	10/02/14 10:11 / sld	09/29/14 08:00	ICP2-HE_141002A	85	26335
Mercury	ND	mg/kg-dry		0.10		SW7471B	09/30/14 13:38 / rgk	09/29/14 13:17	HGCV201-H_140930A	166	26354

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140923wa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140923A: 37** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **09/23/14 16:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		99	90	110				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Run ID :Run Order: **HGCV202-H_140923A: 38** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **09/23/14 16:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		99	95	105				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Run ID :Run Order: **HGCV202-H_140923A: 54** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **09/23/14 17:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		101	90	110				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140924wa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140924A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **09/24/14 11:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		102	90	110				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **09/24/14 11:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		98	95	105				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 34** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **09/24/14 13:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002		103	90	110				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 50** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **09/24/14 14:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		102	90	110				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140925wa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140925A: 36** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **09/25/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		102	90	110				

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **HGCV202-H_140925A: 37** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **09/25/14 15:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002		97	95	105				

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **HGCV202-H_140925A: 52** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **09/25/14 16:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002		101	90	110				

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140930sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **09/30/14 10:14** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00094	0.50	0.001		94	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/30/14 10:17** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		99	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 27** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/30/14 11:39** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		109	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140930sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 50** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **09/30/14 13:04** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00098	0.50	0.001		98	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/30/14 13:07** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		101	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 65** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/30/14 13:40** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		102	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 140930sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 83** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/30/14 14:23** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		103	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 96** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **09/30/14 14:54** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025		104	90	110				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141002sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141002B: 3** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**
Analysis Date: **10/02/14 14:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00097	0.00010	0.001		97	90	110				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 4** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **10/02/14 14:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.00010	0.0025		100	90	110				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 23** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **10/02/14 16:07** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		100	90	110				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **10/02/14 16:26** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		101	90	110				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 71** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **10/02/14 16:58** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		99	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141002sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141002B: 71** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/02/14 16:58** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141007sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141007A: 62** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **10/07/14 16:42** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0010	0.50	0.001		102	90	110				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-028A, H14090234-028B**

Run ID :Run Order: **HGCV201-H_141007A: 63** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/07/14 16:44** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		98	90	110				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-028A, H14090234-028B**

Run ID :Run Order: **HGCV201-H_141007A: 164** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/07/14 17:59** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025		101	90	110				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-028A, H14090234-028B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141009sa

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141009A: 1** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **10/09/14 09:28** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0010	0.50	0.001		105	90	110				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **HGCV201-H_141009A: 2** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/09/14 09:30** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		107	90	110				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **HGCV201-H_141009A: 13** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **10/09/14 09:56** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025		106	90	110				

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 41** SampType: **Method Blank** Lab ID: **MB-26146** Method: **E200.7**
Analysis Date: **09/16/14 13:38** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.05	0.03									
Magnesium	ND	0.01									
Potassium	ND	0.05									
Sodium	ND	0.02									

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 42** SampType: **Laboratory Control Sample** Lab ID: **LCS-26146** Method: **E200.7**
Analysis Date: **09/16/14 13:42** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.489	0.050	0.5		98	85	115				
Calcium	25.1	1.0	25	0.05011	100	85	115				
Magnesium	25.2	1.0	25		101	85	115				
Potassium	26.2	1.0	25		105	85	115				
Sodium	26.3	1.0	25		105	85	115				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 46** SampType: **Serial Dilution** Lab ID: **H14090234-001CDIL** Method: **E200.7**
Analysis Date: **09/16/14 13:57** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.0470	0.050				0	0	0.06063		10	N
Calcium	57.5	1.0				0	0	56.22	2.3	10	
Magnesium	14.1	1.0				0	0	13.95	1.4	10	
Potassium	2.93	1.0				0	0	4.088	33	10	R
Sodium	23.8	1.0				0	0	23.55	1.1	10	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 47** SampType: **Sample Matrix Spike** Lab ID: **H14090234-001CMS3** Method: **E200.7**

Analysis Date: **09/16/14 14:00** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.557	0.050	0.5	0.06063	99	70	130				
Calcium	81.5	1.0	25	56.22	101	70	130				
Magnesium	39.3	1.0	25	13.95	101	70	130				
Potassium	29.7	1.0	25	4.088	102	70	130				
Sodium	48.6	1.0	25	23.55	100	70	130				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 48** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-001CMSD3** Method: **E200.7**

Analysis Date: **09/16/14 14:04** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.562	0.050	0.5	0.06063	100	70	130	0.5569	0.9	20	
Calcium	81.4	1.0	25	56.22	101	70	130	81.5	0.1	20	
Magnesium	39.4	1.0	25	13.95	102	70	130	39.31	0.3	20	
Potassium	30.1	1.0	25	4.088	104	70	130	29.68	1.4	20	
Sodium	49.4	1.0	25	23.55	103	70	130	48.6	1.6	20	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 61** SampType: **Serial Dilution** Lab ID: **H14090234-011CDIL** Method: **E200.7**

Analysis Date: **09/16/14 14:53** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.0572	0.050				0	0	0.06905		10	N
Calcium	58.8	1.0				0	0	58.42	0.6	10	
Magnesium	12.8	1.0				0	0	12.84	0.0	10	
Potassium	5.16	1.0				0	0	6.082	16	10	R
Sodium	37.5	1.0				0	0	37.29	0.7	10	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 62** SampType: **Sample Matrix Spike** Lab ID: **H14090234-011CMS3** Method: **E200.7**

Analysis Date: **09/16/14 14:57** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.553	0.050	0.5	0.06905	97	70	130				
Calcium	82.4	1.0	25	58.42	96	70	130				
Magnesium	37.1	1.0	25	12.84	97	70	130				
Potassium	31.7	1.0	25	6.082	102	70	130				
Sodium	62.3	1.0	25	37.29	100	70	130				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 63** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-011CMSD3** Method: **E200.7**

Analysis Date: **09/16/14 15:00** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.556	0.050	0.5	0.06905	97	70	130	0.553	0.6	20	
Calcium	82.2	1.0	25	58.42	95	70	130	82.35	0.1	20	
Magnesium	37.1	1.0	25	12.84	97	70	130	37.06	0.2	20	
Potassium	31.6	1.0	25	6.082	102	70	130	31.67	0.2	20	
Sodium	62.3	1.0	25	37.29	100	70	130	62.27	0.1	20	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 96** SampType: **Sample Matrix Spike** Lab ID: **H14090234-011CMS3** Method: **E200.8**

Analysis Date: **09/17/14 19:23** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.38	0.030	2.5	0.08654	92	70	130				
Antimony	0.506	0.0010	0.5	0.0003154	101	70	130				
Arsenic	0.519	0.0010	0.5	0.00796	102	70	130				
Barium	0.529	0.050	0.5	0.03315	99	70	130				
Beryllium	0.241	0.0010	0.25		97	70	130				
Boron	0.556	0.050	0.5	0.07685	96	70	130				
Cadmium	0.245	0.0010	0.25	0.000226	98	70	130				
Calcium	83.4	1.0	25	59.66	95	70	130				
Chromium	0.500	0.0050	0.5	0.0002019	100	70	130				
Cobalt	0.456	0.0050	0.5	0.0002561	91	70	130				
Copper	0.510	0.0050	0.5	0.01779	98	70	130				
Iron	2.70	0.020	2.5	0.1887	100	70	130				
Lead	0.496	0.0010	0.5	0.001078	99	70	130				
Magnesium	37.1	1.0	25	13.11	96	70	130				
Manganese	2.35	0.0010	2.5	0.08084	91	70	130				
Molybdenum	0.528	0.0010	0.5	0.005858	104	70	130				
Nickel	0.491	0.0050	0.5	0.0008245	98	70	130				
Potassium	31.7	1.0	25	6.396	101	70	130				
Selenium	0.520	0.0010	0.5	0.0003807	104	70	130				
Silver	0.0476	0.0010	0.05	0.0000796	95	70	130				
Sodium	59.3	1.0	25	36.18	92	70	130				
Uranium	0.499	0.00030	0.5	0.005462	99	70	130				
Vanadium	0.506	0.010	0.5	0.003715	101	70	130				
Zinc	0.517	0.010	0.5	0.03342	97	70	130				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 97** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-011CMSD3** Method: **E200.8**

Analysis Date: **09/17/14 19:27** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.42	0.030	2.5	0.08654	93	70	130	2.379	1.8	20	
Antimony	0.514	0.0010	0.5	0.0003154	103	70	130	0.5061	1.6	20	
Arsenic	0.525	0.0010	0.5	0.00796	103	70	130	0.5192	1.2	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 97** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-011CMSD3** Method: **E200.8**

Analysis Date: **09/17/14 19:27** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.528	0.050	0.5	0.03315	99	70	130	0.5289	0.2	20	
Beryllium	0.243	0.0010	0.25		97	70	130	0.2413	0.6	20	
Boron	0.569	0.050	0.5	0.07685	98	70	130	0.5559	2.3	20	
Cadmium	0.249	0.0010	0.25	0.000226	100	70	130	0.2449	1.9	20	
Calcium	84.6	1.0	25	59.66	100	70	130	83.42	1.4	20	
Chromium	0.507	0.0050	0.5	0.0002019	101	70	130	0.5002	1.3	20	
Cobalt	0.468	0.0050	0.5	0.0002561	93	70	130	0.4562	2.5	20	
Copper	0.523	0.0050	0.5	0.01779	101	70	130	0.5098	2.6	20	
Iron	2.64	0.020	2.5	0.1887	98	70	130	2.701	2.2	20	
Lead	0.502	0.0010	0.5	0.001078	100	70	130	0.4957	1.2	20	
Magnesium	37.3	1.0	25	13.11	97	70	130	37.11	0.5	20	
Manganese	2.41	0.0010	2.5	0.08084	93	70	130	2.349	2.4	20	
Molybdenum	0.541	0.0010	0.5	0.005858	107	70	130	0.5282	2.5	20	
Nickel	0.496	0.0050	0.5	0.0008245	99	70	130	0.4914	0.9	20	
Potassium	31.9	1.0	25	6.396	102	70	130	31.72	0.5	20	
Selenium	0.511	0.0010	0.5	0.0003807	102	70	130	0.52	1.8	20	
Silver	0.0475	0.0010	0.05	0.0000796	95	70	130	0.04763	0.3	20	
Sodium	60.4	1.0	25	36.18	97	70	130	59.28	1.8	20	
Uranium	0.502	0.00030	0.5	0.005462	99	70	130	0.4988	0.7	20	
Vanadium	0.516	0.010	0.5	0.003715	102	70	130	0.5063	1.9	20	
Zinc	0.521	0.010	0.5	0.03342	98	70	130	0.5175	0.8	20	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 162** SampType: **Method Blank** Lab ID: **MB-26146** Method: **E200.8**

Analysis Date: **09/18/14 03:02** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.002	0.0006									
Antimony	ND	3E-05									
Arsenic	7E-05	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Boron	0.002	0.001									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 162** SampType: **Method Blank** Lab ID: **MB-26146** Method: **E200.8**

Analysis Date: **09/18/14 03:02** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.0009	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.007	0.002									
Lead	4E-05	3E-05									
Magnesium	0.005	0.002									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									
Selenium	ND	0.0002									
Silver	ND	7E-05									
Sodium	ND	0.03									
Uranium	ND	3E-05									
Vanadium	0.0003	7E-05									
Zinc	0.002	0.001									

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 163** SampType: **Laboratory Control Sample** Lab ID: **LCS-26146** Method: **E200.8**

Analysis Date: **09/18/14 03:06** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.33	0.030	2.5	0.001845	93	85	115				
Antimony	0.512	0.0010	0.5		102	85	115				
Arsenic	0.507	0.0010	0.5	0.0000696	101	85	115				
Barium	0.504	0.050	0.5		101	85	115				
Beryllium	0.246	0.0010	0.25		98	85	115				
Boron	0.484	0.050	0.5	0.001945	96	85	115				
Cadmium	0.263	0.0010	0.25	0.0009233	105	85	115				
Calcium	25.0	1.0	25		100	85	115				
Chromium	0.495	0.0050	0.5		99	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 163** SampType: **Laboratory Control Sample** Lab ID: **LCS-26146** Method: **E200.8**

Analysis Date: **09/18/14 03:06** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.473	0.0050	0.5		95	85	115				
Copper	0.494	0.0050	0.5		99	85	115				
Iron	2.44	0.020	2.5	0.007312	97	85	115				
Lead	0.504	0.0010	0.5	0.0000366	101	85	115				
Magnesium	23.9	1.0	25	0.00499	96	85	115				
Manganese	2.31	0.0010	2.5		92	85	115				
Molybdenum	0.529	0.0010	0.5		106	85	115				
Nickel	0.488	0.0050	0.5		98	85	115				
Potassium	24.3	1.0	25		97	85	115				
Selenium	0.501	0.0010	0.5		100	85	115				
Silver	0.0479	0.0010	0.05		96	85	115				
Sodium	23.7	1.0	25		95	85	115				
Uranium	0.495	0.00030	0.5		99	85	115				
Vanadium	0.497	0.010	0.5	0.0002521	99	85	115				
Zinc	0.492	0.010	0.5	0.001955	98	85	115				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 167** SampType: **Sample Matrix Spike** Lab ID: **H14090234-001CMS3** Method: **E200.8**

Analysis Date: **09/18/14 03:23** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.38	0.030	2.5	0.09657	91	70	130				
Antimony	0.528	0.0010	0.5	0.000286	106	70	130				
Arsenic	0.536	0.0010	0.5	0.005197	106	70	130				
Barium	0.558	0.050	0.5	0.04617	102	70	130				
Beryllium	0.244	0.0010	0.25		97	70	130				
Boron	0.549	0.050	0.5	0.06681	96	70	130				
Cadmium	0.261	0.0010	0.25	0.0001398	104	70	130				
Calcium	80.6	1.0	25	54.96	103	70	130				
Chromium	0.513	0.0050	0.5	0.0002668	103	70	130				
Cobalt	0.472	0.0050	0.5	0.0002117	94	70	130				
Copper	0.516	0.0050	0.5	0.01025	101	70	130				
Iron	2.77	0.020	2.5	0.3471	97	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 167** SampType: **Sample Matrix Spike** Lab ID: **H14090234-001CMS3** Method: **E200.8**

Analysis Date: **09/18/14 03:23** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.508	0.0010	0.5	0.003245	101	70	130				
Magnesium	38.4	1.0	25	13.51	100	70	130				
Manganese	2.38	0.0010	2.5	0.08403	92	70	130				
Molybdenum	0.551	0.0010	0.5	0.005988	109	70	130				
Nickel	0.498	0.0050	0.5	0.0004285	100	70	130				
Potassium	29.2	1.0	25	4.161	100	70	130				
Selenium	0.506	0.0010	0.5	0.0002423	101	70	130				
Silver	0.0480	0.0010	0.05	0.0000795	96	70	130				
Sodium	46.8	1.0	25	22.12	99	70	130				
Uranium	0.515	0.00030	0.5	0.004644	102	70	130				
Vanadium	0.517	0.010	0.5	0.002638	103	70	130				
Zinc	0.525	0.010	0.5	0.02875	99	70	130				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 168** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-001CMSD3** Method: **E200.8**

Analysis Date: **09/18/14 03:27** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.37	0.030	2.5	0.09657	91	70	130	2.377	0.3	20	
Antimony	0.521	0.0010	0.5	0.000286	104	70	130	0.528	1.3	20	
Arsenic	0.536	0.0010	0.5	0.005197	106	70	130	0.5363	0.1	20	
Barium	0.551	0.050	0.5	0.04617	101	70	130	0.5585	1.4	20	
Beryllium	0.240	0.0010	0.25		96	70	130	0.2437	1.4	20	
Boron	0.543	0.050	0.5	0.06681	95	70	130	0.5493	1.1	20	
Cadmium	0.258	0.0010	0.25	0.0001398	103	70	130	0.2612	1.1	20	
Calcium	80.7	1.0	25	54.96	103	70	130	80.59	0.1	20	
Chromium	0.514	0.0050	0.5	0.0002668	103	70	130	0.5128	0.3	20	
Cobalt	0.467	0.0050	0.5	0.0002117	93	70	130	0.4718	1.0	20	
Copper	0.517	0.0050	0.5	0.01025	101	70	130	0.5163	0.2	20	
Iron	2.82	0.020	2.5	0.3471	99	70	130	2.774	1.6	20	
Lead	0.499	0.0010	0.5	0.003245	99	70	130	0.5077	1.7	20	
Magnesium	37.7	1.0	25	13.51	97	70	130	38.43	1.9	20	
Manganese	2.39	0.0010	2.5	0.08403	92	70	130	2.385	0.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 168** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-001CMSD3** Method: **E200.8**

Analysis Date: **09/18/14 03:27** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.537	0.0010	0.5	0.005988	106	70	130	0.5513	2.5	20	
Nickel	0.499	0.0050	0.5	0.0004285	100	70	130	0.4984	0.1	20	
Potassium	29.3	1.0	25	4.161	101	70	130	29.22	0.4	20	
Selenium	0.513	0.0010	0.5	0.0002423	102	70	130	0.5064	1.2	20	
Silver	0.0472	0.0010	0.05	0.0000795	94	70	130	0.04796	1.5	20	
Sodium	46.5	1.0	25	22.12	97	70	130	46.82	0.8	20	
Uranium	0.510	0.00030	0.5	0.004644	101	70	130	0.5154	1.1	20	
Vanadium	0.519	0.010	0.5	0.002638	103	70	130	0.5172	0.4	20	
Zinc	0.519	0.010	0.5	0.02875	98	70	130	0.5246	1.1	20	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140918A: 40** SampType: **Method Blank** Lab ID: **MB-26146** Method: **E200.8**

Analysis Date: **09/18/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.002	0.0006									
Antimony	3E-05	3E-05									
Arsenic	ND	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Boron	0.001	0.001									
Cadmium	0.0008	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	0.0007	0.0003									
Iron	0.006	0.002									
Lead	ND	3E-05									
Magnesium	0.003	0.002									
Manganese	0.0004	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26146

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140918A: 40** SampType: **Method Blank** Lab ID: **MB-26146** Method: **E200.8**

Analysis Date: **09/18/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.0002									
Silver	ND	7E-05									
Sodium	ND	0.03									
Uranium	ND	3E-05									
Vanadium	0.0002	7E-05									
Zinc	0.001	0.001									

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26163

Date: *16-Oct-14*

Run ID :Run Order: **FIA202-HE_140915A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-26163** Method: **E365.1**
Analysis Date: **09/15/14 15:37** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.420	0.010	0.4		105	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Run ID :Run Order: **FIA202-HE_140915A: 42** SampType: **Method Blank** Lab ID: **MB-26163** Method: **E365.1**
Analysis Date: **09/15/14 15:38** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Run ID :Run Order: **FIA202-HE_140915A: 58** SampType: **Sample Matrix Spike** Lab ID: **H14090214-021CMS** Method: **E365.1**
Analysis Date: **09/15/14 15:55** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.222	0.010	0.2	0.00583	108	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Run ID :Run Order: **FIA202-HE_140915A: 59** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090214-021CMSD** Method: **E365.1**
Analysis Date: **09/15/14 15:56** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.224	0.010	0.2	0.00583	109	90	110	0.2221	0.6	20	

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26164

Date: *16-Oct-14*

Run ID :Run Order: **FIA202-HE_140915A: 71** SampType: **Laboratory Control Sample** Lab ID: **LCS-26164** Method: **E365.1**
Analysis Date: **09/15/14 16:08** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.428	0.010	0.4		107	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140915A: 72** SampType: **Method Blank** Lab ID: **MB-26164** Method: **E365.1**
Analysis Date: **09/15/14 16:09** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-26164** Method: **E365.1**
Analysis Date: **09/16/14 13:33** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.396	0.010	0.4	0.00149	99	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 12** SampType: **Method Blank** Lab ID: **MB-26164** Method: **E365.1**
Analysis Date: **09/16/14 13:34** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.001	0.001									

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 15** SampType: **Sample Matrix Spike** Lab ID: **H14090234-005DMS** Method: **E365.1**
Analysis Date: **09/16/14 13:37** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.194	0.010	0.2	0.00196	96	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26164

Date: *16-Oct-14*

Run ID :Run Order: **FIA202-HE_140916A: 16** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-005DMSD** Method: **E365.1**

Analysis Date: **09/16/14 13:38** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.197	0.010	0.2	0.00196	98	90	110	0.1945	1.4	20	

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 28** SampType: **Sample Matrix Spike** Lab ID: **H14090234-014DMS** Method: **E365.1**

Analysis Date: **09/16/14 13:50** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.432	0.010	0.2	0.2255	103	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 29** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-014DMSD** Method: **E365.1**

Analysis Date: **09/16/14 13:51** Units: **mg/L** **Prep Info:** Prep Date: **9/15/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.433	0.010	0.2	0.2255	104	90	110	0.4324	0.1	20	

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26206

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140919A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-26206** Method: **A4500 N-C**
Analysis Date: **09/18/14 14:59** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	16.1	0.30	15.2		106	90	110				

Associated samples: **H14090234-001A**

Run ID :Run Order: **FIA203-HE_140919A: 12** SampType: **Method Blank** Lab ID: **MB-26206** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:00** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14090234-001A**

Run ID :Run Order: **FIA203-HE_140919A: 31** SampType: **Sample Matrix Spike** Lab ID: **H14090214-024BMS** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:23** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.40	0.10	1	0.5402	86	90	110				S

Associated samples: **H14090234-001A**

Run ID :Run Order: **FIA203-HE_140919A: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090214-024BMSD** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:24** Units: **mg/L** **Prep Info:** Prep Date: **9/18/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.37	0.10	1	0.5402	83	90	110	1.404	2.6	20	S

Associated samples: **H14090234-001A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26222

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140922A: 22** SampType: **Method Blank** Lab ID: **MB-26222** Method: **E200.8**
Analysis Date: **09/22/14 12:28** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	3E-05	3E-05									
Silver	8E-05	7E-05									

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 23** SampType: **Laboratory Control Sample** Lab ID: **LCS-26222** Method: **E200.8**
Analysis Date: **09/22/14 12:33** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.259	0.0010	0.25	0.0000284	104	85	115				
Silver	0.0486	0.0010	0.05	0.0000768	97	85	115				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 28** SampType: **Sample Matrix Spike** Lab ID: **H14090234-002CMS3** Method: **E200.8**
Analysis Date: **09/22/14 12:54** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.250	0.0010	0.25	0.0001427	100	70	130				
Silver	0.0478	0.0010	0.05		96	70	130				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 29** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-002CMSD3** Method: **E200.8**
Analysis Date: **09/22/14 12:58** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.249	0.0010	0.25	0.0001427	100	70	130	0.25	0.4	20	
Silver	0.0477	0.0010	0.05		95	70	130	0.04775	0.1	20	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 43** SampType: **Sample Matrix Spike** Lab ID: **H14090234-012CMS3** Method: **E200.8**
Analysis Date: **09/22/14 13:59** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.249	0.0010	0.25	0.0002345	99	70	130				
Silver	0.0480	0.0010	0.05		96	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26222

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140922A: 43** SampType: **Sample Matrix Spike** Lab ID: **H14090234-012CMS3** Method: **E200.8**

Analysis Date: **09/22/14 13:59** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 44** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-012CMSD3** Method: **E200.8**

Analysis Date: **09/22/14 14:03** Units: **mg/L** **Prep Info:** Prep Date: **9/19/2014** Prep Method: **E200.2**

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.246	0.0010	0.25	0.0002345	98	70	130	0.2488	1.3	20	
Silver	0.0468	0.0010	0.05		94	70	130	0.04803	2.7	20	

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26246

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140923A: 40** SampType: **Method Blank** Lab ID: **MB-26246** Method: **E245.1**
Analysis Date: **09/23/14 16:41** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Run ID :Run Order: **HGCV202-H_140923A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-26246** Method: **E245.1**
Analysis Date: **09/23/14 16:45** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015		107	90	110				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Run ID :Run Order: **HGCV202-H_140923A: 46** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001BMS** Method: **E245.1**
Analysis Date: **09/23/14 17:06** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		96	70	130				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Run ID :Run Order: **HGCV202-H_140923A: 47** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001BMSD** Method: **E245.1**
Analysis Date: **09/23/14 17:11** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		95	70	130	0.0001443	1.7	20	

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Run ID :Run Order: **HGCV202-H_140923A: 66** SampType: **Sample Matrix Spike** Lab ID: **H14090234-005BMS** Method: **E245.1**
Analysis Date: **09/23/14 18:38** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		92	70	130				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26246

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140923A: 67** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-005BMSD** Method: **E245.1**

Analysis Date: **09/23/14 18:42** Units: **mg/L** **Prep Info:** Prep Date: **9/22/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015		**92**	70	130	0.0001381	**0.1**	20	

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26263

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140924A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-26263** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:12** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	15.4	0.30	15.2		101	90	110				

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A**

Run ID :Run Order: **FIA203-HE_140924A: 12** SampType: **Method Blank** Lab ID: **MB-26263** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:13** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A**

Run ID :Run Order: **FIA203-HE_140924A: 25** SampType: **Sample Matrix Spike** Lab ID: **H14090234-013AMS** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:29** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.09	0.10	1		109	90	110				

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A**

Run ID :Run Order: **FIA203-HE_140924A: 26** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-013AMSD** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:30** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.02	0.10	1		102	90	110	1.092	7.2	20	

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26264

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140924A: 30** SampType: **Laboratory Control Sample** Lab ID: **LCS-26264** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:35** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	14.7	0.30	15.2		97	90	110				

Associated samples: **H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **FIA203-HE_140924A: 31** SampType: **Method Blank** Lab ID: **MB-26264** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **FIA203-HE_140924A: 37** SampType: **Sample Matrix Spike** Lab ID: **H14090248-001AMS** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:43** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.36	0.10	1	0.2445	112	90	110				S

Associated samples: **H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **FIA203-HE_140924A: 38** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090248-001AMSD** Method: **A4500 N-C**
Analysis Date: **09/24/14 10:44** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.41	0.10	1	0.2445	117	90	110	1.363	3.5	20	S

Associated samples: **H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26265

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140924A: 66** SampType: **Laboratory Control Sample** Lab ID: **LCS-26265** Method: **A4500 N-C**
Analysis Date: **09/24/14 11:18** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	14.4	0.30	15.2		95	90	110				

Associated samples: **H14090234-002A, H14090234-003A**

Run ID :Run Order: **FIA203-HE_140924A: 67** SampType: **Method Blank** Lab ID: **MB-26265** Method: **A4500 N-C**
Analysis Date: **09/24/14 11:19** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14090234-002A, H14090234-003A**

Run ID :Run Order: **FIA203-HE_140924A: 69** SampType: **Sample Matrix Spike** Lab ID: **H14090321-003BMS** Method: **A4500 N-C**
Analysis Date: **09/24/14 11:21** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.62	0.10	1	0.6236	100	90	110				

Associated samples: **H14090234-002A, H14090234-003A**

Run ID :Run Order: **FIA203-HE_140924A: 70** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090321-003BMSD** Method: **A4500 N-C**
Analysis Date: **09/24/14 11:22** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.68	0.10	1	0.6236	105	90	110	1.625	3.2	20	

Associated samples: **H14090234-002A, H14090234-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26288

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140924A: 36** SampType: **Method Blank** Lab ID: **MB-26288** Method: **E245.1**
Analysis Date: **09/24/14 13:39** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	3E-06	1E-06									

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 37** SampType: **Laboratory Control Sample** Lab ID: **LCS-26288** Method: **E245.1**
Analysis Date: **09/24/14 13:44** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0.00000329	103	90	110				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 48** SampType: **Sample Matrix Spike** Lab ID: **H14090234-009CMS** Method: **E245.1**
Analysis Date: **09/24/14 14:30** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00001297	92	70	130				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 49** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-009CMSD** Method: **E245.1**
Analysis Date: **09/24/14 14:34** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0.00001297	96	70	130	0.0001515	3.2	20	

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Run ID :Run Order: **HGCV202-H_140924A: 62** SampType: **Sample Matrix Spike** Lab ID: **H14090234-014CMS** Method: **E245.1**
Analysis Date: **09/24/14 15:29** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0.00001474	92	70	130				

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26288

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140924A: 63** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-014CMSD** Method: **E245.1**

Analysis Date: **09/24/14 15:34** Units: **mg/L** **Prep Info:** Prep Date: **9/23/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0.00001474	**94**	70	130	0.0001527	**1.9**	20	

Associated samples: **H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26304

Date: *16-Oct-14*

Run ID :Run Order: **HGCV202-H_140925A: 54** SampType: **Method Blank** Lab ID: **MB-26304** Method: **E245.1**
Analysis Date: **09/25/14 16:27** Units: **mg/L** **Prep Info:** Prep Date: **9/24/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **HGCV202-H_140925A: 55** SampType: **Laboratory Control Sample** Lab ID: **LCS-26304** Method: **E245.1**
Analysis Date: **09/25/14 16:31** Units: **mg/L** **Prep Info:** Prep Date: **9/24/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0.0000007	107	90	110				

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **HGCV202-H_140925A: 66** SampType: **Sample Matrix Spike** Lab ID: **H14090241-002BMS** Method: **E245.1**
Analysis Date: **09/25/14 17:17** Units: **mg/L** **Prep Info:** Prep Date: **9/24/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015	0.00000419	89	70	130				

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **HGCV202-H_140925A: 67** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090241-002BMSD** Method: **E245.1**
Analysis Date: **09/25/14 17:22** Units: **mg/L** **Prep Info:** Prep Date: **9/24/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015	0.00000419	94	70	130	0.0001374	5.1	20	

Associated samples: **H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 81** SampType: **Method Blank** Lab ID: **MB-26333** Method: **SW6010B**

Analysis Date: **09/30/14 21:25** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1	0.3									
Barium	0.2	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.03	0.02									
Nickel	ND	0.07									
Vanadium	0.2	0.1									
Zinc	2	0.09									

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Run ID :Run Order: **ICP2-HE_140930A: 82** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26333** Method: **SW6010B**

Analysis Date: **09/30/14 21:29** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	252	5.0	250	1.049	100	80	120				
Barium	49.2	1.0	50	0.208	98	80	120				
Cobalt	47.6	1.0	50		95	80	120				
Copper	49.3	1.0	50		99	80	120				
Iron	264	5.0	250	14.62	100	80	120				
Manganese	247	1.0	250	0.0335	99	80	120				
Nickel	51.3	1.0	50		103	80	120				
Vanadium	50.5	1.0	50	0.187	101	80	120				
Zinc	48.7	1.0	50	2.186	93	80	120				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 83** SampType: **Laboratory Control Sample** Lab ID: **LCS-26333** Method: **SW6010B**

Analysis Date: **09/30/14 21:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12600	5.0	14700	1.049	86	50.7	131.3				
Barium	529	1.0	614	0.208	86	80.6	112.2				
Cobalt	45.2	1.0	57.4		79	73.3	103.7				
Copper	247	1.1	280		88	77.5	109.6				
Iron	19300	5.0	23000	14.62	84	39.6	138.3				
Manganese	355	1.0	369	0.0335	96	80.8	115.7				
Nickel	55.1	1.0	61		90	72.3	103.4				
Vanadium	63.8	1.0	73	0.187	87	66.6	107.3				
Zinc	186	1.0	213	2.186	86	74.2	109.9				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Run ID :Run Order: **ICP2-HE_140930A: 107** SampType: **Serial Dilution** Lab ID: **H14090234-064ADIL** Method: **SW6010B**

Analysis Date: **09/30/14 23:02** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10900	18				0	0	10530	3.1	10	
Barium	136	1.0				0	0	131.4	3.4	10	
Cobalt	ND	3.1				0	0	3.422		10	
Copper	325	6.0				0	0	316.8	2.6	10	
Iron	17300	16				0	0	16680	3.8	10	
Manganese	1150	1.0				0	0	1112	3.0	10	
Nickel	9.91	1.9				0	0	11.18		10	N
Vanadium	44.6	4.0				0	0	42.84	4.0	10	
Zinc	997	2.5				0	0	953.6	4.5	10	

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 108** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-064APDS** Method: **SW6010B**

Analysis Date: **09/30/14 23:05** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11800	5.0	1400	10530		75	125				A
Barium	385	1.0	279.9	131.4	91	75	125				
Cobalt	243	1.0	279.9	3.422	86	75	125				
Copper	569	1.2	279.9	316.8	90	75	125				
Iron	17600	5.0	1400	16680		75	125				A
Manganese	2340	1.0	1400	1112	87	75	125				
Nickel	265	1.0	279.9	11.18	91	75	125				
Vanadium	295	1.0	279.9	42.84	90	75	125				
Zinc	1170	1.0	279.9	953.6	77	75	125				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Run ID :Run Order: **ICP2-HE_140930A: 109** SampType: **Sample Matrix Spike** Lab ID: **H14090234-064AMS** Method: **SW6010B**

Analysis Date: **09/30/14 23:09** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12300	5.0	271.7	10530		75	125				A
Barium	182	1.0	54.35	131.4	94	75	125				
Cobalt	52.7	1.0	54.35	3.422	91	75	125				
Copper	354	1.2	54.35	316.8		75	125				A
Iron	16200	5.0	271.7	16680		75	125				A
Manganese	1300	1.0	271.7	1112		75	125				A
Nickel	62.9	1.0	54.35	11.18	95	75	125				
Vanadium	94.4	1.0	54.35	42.84	95	75	125				
Zinc	945	1.0	54.35	953.6		75	125				A

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 110** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-064AMSD** Method: **SW6010B**

Analysis Date: **09/30/14 23:13** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13000	5.0	274.7	10530		75	125	12320	5.4	20	A
Barium	191	1.0	54.95	131.4	109	75	125	182.2	4.9	20	
Cobalt	53.2	1.0	54.95	3.422	91	75	125	52.68	1.0	20	
Copper	383	1.2	54.95	316.8		75	125	354.5	7.7	20	A
Iron	17100	5.0	274.7	16680		75	125	16150	6.0	20	A
Manganese	1430	1.0	274.7	1112		75	125	1304	8.9	20	A
Nickel	64.5	1.0	54.95	11.18	97	75	125	62.92	2.4	20	
Vanadium	97.9	1.0	54.95	42.84	100	75	125	94.38	3.7	20	
Zinc	1000	1.0	54.95	953.6		75	125	945.3	5.7	20	A

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 19** SampType: **Method Blank** Lab ID: **MB-26333** Method: **SW6020**

Analysis Date: **09/30/14 13:24** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Run ID :Run Order: **ICPMS204-B_140930A: 20** SampType: **Laboratory Control Sample** Lab ID: **LCS-26333** Method: **SW6020**

Analysis Date: **09/30/14 13:29** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.7	1.0	126		37	2.2	92.9				
Arsenic	305	1.0	343		89	72.3	106.4				
Beryllium	45.2	1.0	51		89	76.3	108.6				
Boron	75.4	4.7	93.2		81	59.4	101.9				
Cadmium	119	1.0	137		87	73	105.1				
Chromium	73.4	1.0	76		97	72.8	109.1				
Lead	176	1.0	187		94	75.9	108.6				
Molybdenum	146	1.0	172		85	68.6	105.8				
Selenium	197	1.0	196		100	72.5	112.2				
Silver	60.7	1.0	69		88	67.8	112.8				
Uranium	107	1.0	100		107	80	120				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 21** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26333** Method: **SW6020**

Analysis Date: **09/30/14 13:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.8	1.0	50		98	80	120				
Arsenic	51.8	1.0	50		104	80	120				
Beryllium	24.8	1.0	25		99	80	120				
Boron	49.0	4.5	50		98	80	120				
Cadmium	25.6	1.0	25		102	80	120				
Chromium	52.4	1.0	50		105	80	120				
Lead	49.3	1.0	50		99	80	120				
Molybdenum	48.8	1.0	50		98	80	120				
Selenium	55.5	1.0	50		111	80	120				
Silver	24.0	1.0	25		96	80	120				
Uranium	48.4	1.0	50		97	80	120				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Run ID :Run Order: **ICPMS204-B_140930A: 48** SampType: **Serial Dilution** Lab ID: **H14090234-064ADIL** Method: **SW6020**

Analysis Date: **09/30/14 15:36** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.3565		10	
Arsenic	37.2	1.7				0	0	37.28	0.1	10	
Beryllium	ND	1.0				0	0	0.5598		10	
Boron	ND	24				0	0			10	
Cadmium	5.98	1.0				0	0	5.663		10	N
Chromium	21.7	1.1				0	0	21.69	0.2	10	
Lead	138	1.3				0	0	131.1	4.8	10	
Molybdenum	1.77	1.0				0	0	1.878		10	N
Selenium	ND	1.9				0	0	0.5908		10	
Silver	ND	1.5				0	0	1.207		10	
Uranium	3.13	1.0				0	0	2.992		10	N

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 49** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-064APDS** Method: **SW6020**

Analysis Date: **09/30/14 15:42** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2480	1.0	2718	0.3565	91	75	125				
Arsenic	2640	1.0	2718	37.28	96	75	125				
Beryllium	1210	1.0	1359	0.5598	89	75	125				
Boron	2450	4.9	2718		90	75	125				
Cadmium	1220	1.0	1359	5.663	89	75	125				
Chromium	2570	1.0	2718	21.69	94	75	125				
Lead	2600	1.0	2718	131.1	91	75	125				
Molybdenum	2510	1.0	2718	1.878	92	75	125				
Selenium	2740	1.0	2718	0.5908	101	75	125				
Silver	1000	1.0	1359	1.207	74	75	125				S
Uranium	2560	1.0	2718	2.992	94	75	125				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Run ID :Run Order: **ICPMS204-B_140930A: 50** SampType: **Sample Matrix Spike** Lab ID: **H14090234-064AMS** Method: **SW6020**

Analysis Date: **09/30/14 15:46** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	22.8	1.0	54.35	0.3565	41	75	125				S
Arsenic	89.7	1.0	54.35	37.28	97	75	125				
Beryllium	26.8	1.0	27.17	0.5598	96	75	125				
Boron	68.5	4.9	54.35		126	75	125				S
Cadmium	32.3	1.0	27.17	5.663	98	75	125				
Chromium	77.7	1.0	54.35	21.69	103	75	125				
Lead	180	1.0	54.35	131.1	90	75	125				
Molybdenum	53.5	1.0	54.35	1.878	95	75	125				
Selenium	60.1	1.0	54.35	0.5908	110	75	125				
Silver	31.3	1.0	27.17	1.207	111	75	125				
Uranium	55.4	1.0	54.35	2.992	96	75	125				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26333

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-064AMSD** Method: **SW6020**

Analysis Date: **09/30/14 15:50** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.2	1.0	54.95	0.3565	38	75	125	22.77	7.2	20	S
Arsenic	95.0	1.0	54.95	37.28	105	75	125	89.73	5.7	20	
Beryllium	27.8	1.0	27.47	0.5598	99	75	125	26.77	3.8	20	
Boron	63.5	4.9	54.95		115	75	125	68.53	7.7	20	
Cadmium	33.8	1.0	27.47	5.663	102	75	125	32.28	4.5	20	
Chromium	82.0	1.0	54.95	21.69	110	75	125	77.66	5.5	20	
Lead	194	1.0	54.95	131.1	115	75	125	179.9	7.7	20	
Molybdenum	56.0	1.0	54.95	1.878	98	75	125	53.51	4.5	20	
Selenium	61.3	1.0	54.95	0.5908	111	75	125	60.11	2.0	20	
Silver	30.7	1.0	27.47	1.207	107	75	125	31.33	2.0	20	
Uranium	56.9	1.0	54.95	2.992	98	75	125	55.41	2.6	20	

Associated samples: **H14090234-019A, H14090234-019B, H14090234-022A, H14090234-022B, H14090234-025A, H14090234-025B, H14090234-028A, H14090234-028B, H14090234-031A, H14090234-031B, H14090234-034A, H14090234-034B, H14090234-037A, H14090234-037B, H14090234-040A, H14090234-040B, H14090234-043A, H14090234-043B, H14090234-046A, H14090234-046B, H14090234-052A, H14090234-052B, H14090234-055A, H14090234-055B, H14090234-058A, H14090234-058B, H14090234-061A, H14090234-061B, H14090234-064A, H14090234-064B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 111** SampType: **Method Blank** Lab ID: **MB-26334** Method: **SW6010B**

Analysis Date: **09/30/14 23:16** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.8	0.3									
Barium	0.05	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.07	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.5	0.09									

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICP2-HE_140930A: 112** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26334** Method: **SW6010B**

Analysis Date: **09/30/14 23:20** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	243	5.0	250	0.7515	97	80	120				
Barium	48.5	1.0	50	0.05	97	80	120				
Cobalt	44.8	1.0	50		90	80	120				
Copper	48.5	1.0	50		97	80	120				
Iron	267	5.0	250	14.01	101	80	120				
Manganese	239	1.0	250	0.0695	95	80	120				
Nickel	48.0	1.0	50		96	80	120				
Vanadium	48.9	1.0	50		98	80	120				
Zinc	45.9	1.0	50	0.454	91	80	120				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 113** SampType: **Laboratory Control Sample** Lab ID: **LCS-26334** Method: **SW6010B**

Analysis Date: **09/30/14 23:24** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12300	5.0	14700	0.7515	84	50.7	131.3				
Barium	518	1.0	614	0.05	84	80.6	112.2				
Cobalt	43.0	1.0	57.4		75	73.3	103.7				
Copper	233	1.1	280		83	77.5	109.6				
Iron	18500	5.0	23000	14.01	80	39.6	138.3				
Manganese	344	1.0	369	0.0695	93	80.8	115.7				
Nickel	51.4	1.0	61		84	72.3	103.4				
Vanadium	61.0	1.0	73		84	66.6	107.3				
Zinc	171	1.0	213	0.454	80	74.2	109.9				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICP2-HE_140930A: 137** SampType: **Serial Dilution** Lab ID: **H14090234-065ADIL** Method: **SW6010B**

Analysis Date: **10/01/14 00:53** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3990	16				0	0	3833	4.0	10	
Barium	93.2	1.0				0	0	89.9	3.7	10	
Cobalt	ND	2.8				0	0			10	
Copper	71.4	5.4				0	0	65.42	8.7	10	
Iron	9490	14				0	0	9106	4.1	10	
Manganese	312	1.0				0	0	300.8	3.6	10	
Nickel	2.32	1.7				0	0	3.844		10	N
Vanadium	25.6	3.6				0	0	23.92		10	N
Zinc	293	2.3				0	0	282	3.9	10	

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 147** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-065APDS** Method: **SW6010B**

Analysis Date: **10/01/14 01:30** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5110	5.0	1262	3833	101	75	125				
Barium	324	1.0	252.5	89.9	93	75	125				
Cobalt	229	1.0	252.5		91	75	125				
Copper	300	1.1	252.5	65.42	93	75	125				
Iron	10000	5.0	1262	9106		75	125				A
Manganese	1470	1.0	1262	300.8	93	75	125				
Nickel	233	1.0	252.5	3.844	91	75	125				
Vanadium	261	1.0	252.5	23.92	94	75	125				
Zinc	516	1.0	252.5	282	93	75	125				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICP2-HE_140930A: 148** SampType: **Sample Matrix Spike** Lab ID: **H14090234-065AMS** Method: **SW6010B**

Analysis Date: **10/01/14 01:34** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5080	5.0	247.5	3833		75	125				A
Barium	133	1.0	49.5	89.9	87	75	125				
Cobalt	47.4	1.0	49.5		96	75	125				
Copper	109	1.1	49.5	65.42	88	75	125				
Iron	9190	5.0	247.5	9106		75	125				A
Manganese	535	1.0	247.5	300.8	95	75	125				
Nickel	50.2	1.0	49.5	3.844	94	75	125				
Vanadium	69.9	1.0	49.5	23.92	93	75	125				
Zinc	268	1.0	49.5	282		75	125				A

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 149** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-065AMSD** Method: **SW6010B**

Analysis Date: **10/01/14 01:38** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5190	5.0	247.5	3833		75	125	5081	2.1	20	A
Barium	137	1.0	49.5	89.9	96	75	125	132.7	3.5	20	
Cobalt	46.7	1.0	49.5		94	75	125	47.39	1.5	20	
Copper	110	1.1	49.5	65.42	91	75	125	109	1.2	20	
Iron	9810	5.0	247.5	9106		75	125	9187	6.6	20	A
Manganese	591	1.0	247.5	300.8	117	75	125	535	9.9	20	
Nickel	50.3	1.0	49.5	3.844	94	75	125	50.21	0.1	20	
Vanadium	72.7	1.0	49.5	23.92	99	75	125	69.9	4.0	20	
Zinc	299	1.0	49.5	282		75	125	268.2	11	20	A

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 53** SampType: **Method Blank** Lab ID: **MB-26334** Method: **SW6020**

Analysis Date: **09/30/14 15:59** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.3	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICPMS204-B_140930A: 54** SampType: **Laboratory Control Sample** Lab ID: **LCS-26334** Method: **SW6020**

Analysis Date: **09/30/14 16:03** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.8	1.0	126	0.2912	36	2.2	92.9				
Arsenic	297	1.0	343		87	72.3	106.4				
Beryllium	45.6	1.0	51		89	76.3	108.6				
Boron	77.6	4.3	93.2		83	59.4	101.9				
Cadmium	122	1.0	137		89	73	105.1				
Chromium	74.0	1.0	76		97	72.8	109.1				
Lead	183	1.0	187		98	75.9	108.6				
Molybdenum	149	1.0	172		87	68.6	105.8				
Selenium	193	1.0	196		98	72.5	112.2				
Silver	61.1	1.0	69		89	67.8	112.8				
Uranium	111	1.0	100		111	80	120				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 55** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26334** Method: **SW6020**

Analysis Date: **09/30/14 16:08** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.4	1.0	50	0.2912	96	80	120				
Arsenic	49.9	1.0	50		100	80	120				
Beryllium	24.7	1.0	25		99	80	120				
Boron	51.2	4.5	50		102	80	120				
Cadmium	25.1	1.0	25		100	80	120				
Chromium	50.8	1.0	50		102	80	120				
Lead	48.4	1.0	50		97	80	120				
Molybdenum	48.4	1.0	50		97	80	120				
Selenium	51.5	1.0	50		103	80	120				
Silver	23.7	1.0	25		95	80	120				
Uranium	47.4	1.0	50		95	80	120				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICPMS204-B_140930A: 84** SampType: **Serial Dilution** Lab ID: **H14090234-065ADIL** Method: **SW6020**

Analysis Date: **09/30/14 18:15** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.2025		10	
Arsenic	32.4	1.6				0	0	32.43	0.2	10	
Beryllium	ND	1.0				0	0	0.1865		10	
Boron	ND	22				0	0			10	
Cadmium	ND	1.0				0	0	0.7684		10	
Chromium	8.46	1.0				0	0	8.605		10	N
Lead	96.1	1.2				0	0	94.85	1.3	10	
Molybdenum	ND	1.0				0	0	0.4502		10	
Selenium	ND	1.8				0	0			10	
Silver	ND	1.3				0	0	0.5672		10	
Uranium	2.21	1.0				0	0	2.181		10	N

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 85** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-065APDS** Method: **SW6020**

Analysis Date: **09/30/14 18:19** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2270	1.0	2451	0.2025	92	75	125				
Arsenic	2520	1.0	2451	32.43	101	75	125				
Beryllium	1120	1.0	1226	0.1865	91	75	125				
Boron	2250	4.4	2451		92	75	125				
Cadmium	1110	1.0	1226	0.7684	90	75	125				
Chromium	2390	1.0	2451	8.605	97	75	125				
Lead	2350	1.0	2451	94.85	92	75	125				
Molybdenum	2270	1.0	2451	0.4502	93	75	125				
Selenium	2500	1.0	2451		102	75	125				
Silver	848	1.0	1226	0.5672	69	75	125				S
Uranium	2360	1.0	2451	2.181	96	75	125				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICPMS204-B_140930A: 86** SampType: **Sample Matrix Spike** Lab ID: **H14090234-065AMS** Method: **SW6020**

Analysis Date: **09/30/14 18:23** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	35.9	1.0	49.5	0.2025	72	75	125				S
Arsenic	70.5	1.0	49.5	32.43	77	75	125				
Beryllium	24.3	1.0	24.75	0.1865	97	75	125				
Boron	61.5	4.4	49.5		124	75	125				
Cadmium	25.8	1.0	24.75	0.7684	101	75	125				
Chromium	60.4	1.0	49.5	8.605	105	75	125				
Lead	90.3	1.0	49.5	94.85	-9	75	125				S
Molybdenum	50.3	1.0	49.5	0.4502	101	75	125				
Selenium	53.4	1.0	49.5		108	75	125				
Silver	27.5	1.0	24.75	0.5672	109	75	125				
Uranium	50.4	1.0	49.5	2.181	97	75	125				

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26334

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 87** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-065AMSD** Method: **SW6020**

Analysis Date: **09/30/14 18:28** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	33.5	1.0	49.5	0.2025	67	75	125	35.92	6.8	20	S
Arsenic	70.9	1.0	49.5	32.43	78	75	125	70.52	0.5	20	
Beryllium	25.1	1.0	24.75	0.1865	101	75	125	24.28	3.3	20	
Boron	59.6	4.4	49.5		120	75	125	61.46	3.1	20	
Cadmium	26.2	1.0	24.75	0.7684	103	75	125	25.84	1.5	20	
Chromium	61.5	1.0	49.5	8.605	107	75	125	60.4	1.8	20	
Lead	78.0	1.0	49.5	94.85	-34	75	125	90.27	15	20	S
Molybdenum	49.7	1.0	49.5	0.4502	99	75	125	50.27	1.2	20	
Selenium	53.2	1.0	49.5		107	75	125	53.44	0.5	20	
Silver	27.6	1.0	24.75	0.5672	109	75	125	27.55	0.2	20	
Uranium	49.5	1.0	49.5	2.181	96	75	125	50.42	1.8	20	

Associated samples: **H14090234-020A, H14090234-020B, H14090234-023A, H14090234-023B, H14090234-026A, H14090234-026B, H14090234-029A, H14090234-029B, H14090234-032A, H14090234-032B, H14090234-035A, H14090234-035B, H14090234-038A, H14090234-038B, H14090234-041A, H14090234-041B, H14090234-044A, H14090234-044B, H14090234-047A, H14090234-047B, H14090234-050A, H14090234-050B, H14090234-053A, H14090234-053B, H14090234-056A, H14090234-056B, H14090234-059A, H14090234-059B, H14090234-062A, H14090234-062B, H14090234-065A, H14090234-065B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 150** SampType: **Method Blank** Lab ID: **MB-26335** Method: **SW6010B**

Analysis Date: **10/01/14 01:41** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.06	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.05	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.5	0.09									

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICP2-HE_140930A: 151** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26335** Method: **SW6010B**

Analysis Date: **10/01/14 01:45** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	247	5.0	250		99	80	120				
Barium	49.0	1.0	50	0.06	98	80	120				
Cobalt	45.3	1.0	50		91	80	120				
Copper	48.3	1.0	50		97	80	120				
Iron	244	5.0	250	12.4	93	80	120				
Manganese	238	1.0	250	0.0465	95	80	120				
Nickel	45.5	1.0	50		91	80	120				
Vanadium	48.5	1.0	50		97	80	120				
Zinc	46.5	1.0	50	0.483	92	80	120				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 152** SampType: **Laboratory Control Sample** Lab ID: **LCS-26335** Method: **SW6010B**

Analysis Date: **10/01/14 01:49** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11200	5.0	14700		76	50.7	131.3				
Barium	498	1.0	614	0.06	81	80.6	112.2				
Cobalt	43.3	1.0	57.4		75	73.3	103.7				
Copper	228	1.1	280		81	77.5	109.6				
Iron	17200	5.0	23000	12.4	75	39.6	138.3				
Manganese	336	1.0	369	0.0465	91	80.8	115.7				
Nickel	46.2	1.0	61		76	72.3	103.4				
Vanadium	55.9	1.0	73		77	66.6	107.3				
Zinc	165	1.0	213	0.483	77	74.2	109.9				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICP2-HE_141002A: 17** SampType: **Method Blank** Lab ID: **MB-26335** Method: **SW6010B**

Analysis Date: **10/02/14 09:53** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.06	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	10	0.6									
Manganese	0.08	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.5	0.09									

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141002A: 25** SampType: **Serial Dilution** Lab ID: **H14090234-066ADIL** Method: **SW6010B**

Analysis Date: **10/02/14 10:22** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4090	17				0	0	4016	1.8	10	
Barium	97.5	1.0				0	0	95.29	2.3	10	
Cobalt	ND	2.9				0	0			10	
Copper	51.8	5.6				0	0	49.37		10	N
Iron	7290	15				0	0	6974	4.4	10	
Manganese	381	1.0				0	0	363.8	4.7	10	
Nickel	2.14	1.8				0	0	3.821		10	N
Vanadium	17.6	3.7				0	0	17.13		10	N
Zinc	131	2.4				0	0	127	3.0	10	

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICP2-HE_141002A: 26** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-066APDS** Method: **SW6010B**

Analysis Date: **10/02/14 10:26** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5370	5.0	1301	4016	104	75	125				
Barium	347	1.0	260.1	95.29	97	75	125				
Cobalt	244	1.0	260.1		94	75	125				
Copper	312	1.1	260.1	49.37	101	75	125				
Iron	8370	5.0	1301	6974		75	125				A
Manganese	1660	1.0	1301	363.8	100	75	125				
Nickel	263	1.0	260.1	3.821	100	75	125				
Vanadium	275	1.0	260.1	17.13	99	75	125				
Zinc	369	1.0	260.1	127	93	75	125				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141002A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14090234-066AMS** Method: **SW6010B**

Analysis Date: **10/02/14 10:30** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3940	5.0	252.5	4016		75	125				A
Barium	118	1.0	50.51	95.29	45	75	125				S
Cobalt	52.8	1.0	50.51		104	75	125				
Copper	122	1.1	50.51	49.37	144	75	125				S
Iron	7410	5.0	252.5	6974		75	125				A
Manganese	624	1.0	252.5	363.8	103	75	125				
Nickel	57.3	1.0	50.51	3.821	106	75	125				
Vanadium	66.9	1.0	50.51	17.13	99	75	125				
Zinc	175	1.0	50.51	127	95	75	125				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICP2-HE_141002A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-066AMSD** Method: **SW6010B**

Analysis Date: **10/02/14 10:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3820	5.0	252.5	4016		75	125	3943	3.2	20	A
Barium	117	1.0	50.51	95.29	42	75	125	118	1.2	20	S
Cobalt	48.4	1.0	50.51		96	75	125	52.76	8.7	20	
Copper	95.4	1.1	50.51	49.37	91	75	125	122.3	25	20	R
Iron	6200	5.0	252.5	6974		75	125	7415	18	20	A
Manganese	652	1.0	252.5	363.8	114	75	125	623.6	4.4	20	
Nickel	56.7	1.0	50.51	3.821	105	75	125	57.31	1.2	20	
Vanadium	67.3	1.0	50.51	17.13	99	75	125	66.95	0.5	20	
Zinc	158	1.0	50.51	127	62	75	125	175.1	10	20	S

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 89** SampType: **Method Blank** Lab ID: **MB-26335** Method: **SW6020**

Analysis Date: **09/30/14 18:36** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	5	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICPMS204-B_140930A: 90** SampType: **Laboratory Control Sample** Lab ID: **LCS-26335** Method: **SW6020**

Analysis Date: **09/30/14 18:41** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.3	1.0	126	0.376	36	2.2	92.9				
Arsenic	296	1.0	343		86	72.3	106.4				
Beryllium	44.2	1.0	51		87	76.3	108.6				
Boron	74.8	4.7	93.2	4.962	75	59.4	101.9				
Cadmium	120	1.0	137		87	73	105.1				
Chromium	70.7	1.0	76		93	72.8	109.1				
Lead	178	1.0	187		95	75.9	108.6				
Molybdenum	145	1.0	172		84	68.6	105.8				
Selenium	185	1.0	196		94	72.5	112.2				
Silver	60.4	1.0	69		88	67.8	112.8				
Uranium	107	1.0	100		107	80	120				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 91** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26335** Method: **SW6020**

Analysis Date: **09/30/14 18:45** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.2	1.0	50	0.376	98	80	120				
Arsenic	51.4	1.0	50		103	80	120				
Beryllium	24.9	1.0	25		100	80	120				
Boron	51.2	4.5	50	4.962	93	80	120				
Cadmium	25.6	1.0	25		102	80	120				
Chromium	51.8	1.0	50		104	80	120				
Lead	48.9	1.0	50		98	80	120				
Molybdenum	48.6	1.0	50		97	80	120				
Selenium	52.7	1.0	50		105	80	120				
Silver	23.9	1.0	25		96	80	120				
Uranium	48.1	1.0	50		96	80	120				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICPMS204-B_140930A: 120** SampType: **Serial Dilution** Lab ID: **H14090234-066ADIL** Method: **SW6020**

Analysis Date: **09/30/14 20:53** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1649		10	
Arsenic	13.5	1.6				0	0	14.08		10	N
Beryllium	ND	1.0				0	0			10	
Boron	ND	23				0	0			10	
Cadmium	ND	1.0				0	0	0.2843		10	
Chromium	8.21	1.0				0	0	8.323		10	N
Lead	18.7	1.2				0	0	18.33	2.0	10	
Molybdenum	ND	1.0				0	0	0.4944		10	
Selenium	ND	1.8				0	0			10	
Silver	ND	1.3				0	0			10	
Uranium	ND	1.0				0	0	0.8364		10	

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 121** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-066APDS** Method: **SW6020**

Analysis Date: **09/30/14 20:57** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2410	1.0	2526	0.1649	95	75	125				
Arsenic	2480	1.0	2526	14.08	98	75	125				
Beryllium	1160	1.0	1263		92	75	125				
Boron	2320	4.5	2526		92	75	125				
Cadmium	1190	1.0	1263	0.2843	94	75	125				
Chromium	2420	1.0	2526	8.323	95	75	125				
Lead	2380	1.0	2526	18.33	93	75	125				
Molybdenum	2400	1.0	2526	0.4944	95	75	125				
Selenium	2450	1.0	2526		97	75	125				
Silver	849	1.0	1263		67	75	125				S
Uranium	2460	1.0	2526	0.8364	97	75	125				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICPMS204-B_140930A: 122** SampType: **Sample Matrix Spike** Lab ID: **H14090234-066AMS** Method: **SW6020**

Analysis Date: **09/30/14 21:01** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	42.6	1.0	50.51	0.1649	84	75	125				
Arsenic	68.4	1.0	50.51	14.08	108	75	125				
Beryllium	24.6	1.0	25.25		98	75	125				
Boron	63.3	4.5	50.51		125	75	125				
Cadmium	25.7	1.0	25.25	0.2843	100	75	125				
Chromium	59.6	1.0	50.51	8.323	102	75	125				
Lead	65.6	1.0	50.51	18.33	94	75	125				
Molybdenum	50.1	1.0	50.51	0.4944	98	75	125				
Selenium	55.6	1.0	50.51		110	75	125				
Silver	28.4	1.0	25.25		112	75	125				
Uranium	49.3	1.0	50.51	0.8364	96	75	125				

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26335

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 123** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-066AMSD** Method: **SW6020**

Analysis Date: **09/30/14 21:05** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	40.9	1.0	50.51	0.1649	81	75	125	42.6	4.1	20	
Arsenic	64.6	1.0	50.51	14.08	100	75	125	68.41	5.7	20	
Beryllium	24.9	1.0	25.25		99	75	125	24.65	1.0	20	
Boron	57.3	4.5	50.51		114	75	125	63.28	9.9	20	
Cadmium	26.0	1.0	25.25	0.2843	102	75	125	25.66	1.2	20	
Chromium	59.2	1.0	50.51	8.323	101	75	125	59.65	0.7	20	
Lead	63.0	1.0	50.51	18.33	88	75	125	65.56	4.0	20	
Molybdenum	49.3	1.0	50.51	0.4944	97	75	125	50.13	1.6	20	
Selenium	54.8	1.0	50.51		109	75	125	55.61	1.4	20	
Silver	26.9	1.0	25.25		107	75	125	28.38	5.2	20	
Uranium	49.1	1.0	50.51	0.8364	96	75	125	49.32	0.5	20	

Associated samples: **H14090234-021A, H14090234-021B, H14090234-024A, H14090234-024B, H14090234-027A, H14090234-027B, H14090234-030A, H14090234-030B, H14090234-033A, H14090234-033B, H14090234-036A, H14090234-036B, H14090234-039A, H14090234-039B, H14090234-042A, H14090234-042B, H14090234-045A, H14090234-045B, H14090234-048A, H14090234-048B, H14090234-051A, H14090234-051B, H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26354

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 4** SampType: **Method Blank** Lab ID: **MB-26354** Method: **SW7471B**
Analysis Date: **09/30/14 10:21** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.001	0.0003									

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 6** SampType: **Laboratory Control Sample** Lab ID: **LCS-26354** Method: **SW7471B**
Analysis Date: **09/30/14 10:30** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.9	0.50	5	0.001496	98	80	120				

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 7** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26354** Method: **SW7471B**
Analysis Date: **09/30/14 10:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1		105	80	120				

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 10** SampType: **Sample Matrix Spike** Lab ID: **H14090234-050AMS** Method: **SW7471B**
Analysis Date: **09/30/14 10:40** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	1.001	0.06113	109	80	120				

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26354

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 11** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-050AMSD** Method: **SW7471B**
Analysis Date: **09/30/14 10:42** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	1.001	0.06113	109	80	120	1.151	0.1	20	

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 31** SampType: **Sample Matrix Spike** Lab ID: **H14090234-060AMS** Method: **SW7471B**
Analysis Date: **09/30/14 11:49** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.996	0.1827	114	80	120				

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-060AMSD** Method: **SW7471B**
Analysis Date: **09/30/14 11:51** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.995	0.1827	105	80	120	1.319	6.8	20	

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **HGCV201-H_140930A: 56** SampType: **Sample Matrix Spike** Lab ID: **H14090234-060AMS** Method: **SW7471B**
Analysis Date: **09/30/14 13:18** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.996	0.1616	100	80	120				

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26354

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 57** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-060AMSD** Method: **SW7471B**

Analysis Date: **09/30/14 13:21** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.995	0.1616	94	80	120	1.16	5.5	20	

Associated samples: **H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26355

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 42** SampType: **Method Blank** Lab ID: **MB-26355** Method: **SW7471B**
Analysis Date: **09/30/14 12:16** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.001	0.0003									

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Run ID :Run Order: **HGCV201-H_140930A: 43** SampType: **Laboratory Control Sample** Lab ID: **LCS-26355** Method: **SW7471B**
Analysis Date: **09/30/14 12:18** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.6	0.50	5	0.001312	112	80	120				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Run ID :Run Order: **HGCV201-H_140930A: 69** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26355** Method: **SW7471B**
Analysis Date: **09/30/14 13:49** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1		113	80	120				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Run ID :Run Order: **HGCV201-H_140930A: 72** SampType: **Sample Matrix Spike** Lab ID: **H14090234-032AMS** Method: **SW7471B**
Analysis Date: **09/30/14 13:57** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.4	0.50	0.9804	0.3213	111	80	120				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26355

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_140930A: 73** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-032AMSD** Method: **SW7471B**

Analysis Date: **09/30/14 13:59** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.5	0.50	0.9775	0.3213	116	80	120	1.413	3.2	20	

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Run ID :Run Order: **HGCV201-H_140930A: 87** SampType: **Sample Matrix Spike** Lab ID: **H14090234-042AMS** Method: **SW7471B**

Analysis Date: **09/30/14 14:33** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.994	0.00934	119	80	120				

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Run ID :Run Order: **HGCV201-H_140930A: 88** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-042AMSD** Method: **SW7471B**

Analysis Date: **09/30/14 14:35** Units: **mg/kg** **Prep Info:** Prep Date: **9/29/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.993	0.00934	119	80	120	1.192	0.1	20	

Associated samples: **H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26387

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141002B: 6** SampType: **Method Blank** Lab ID: **MB-26387** Method: **SW7471B**
Analysis Date: **10/02/14 14:55** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0003	0.0003									

Associated samples: **H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 8** SampType: **Laboratory Control Sample** Lab ID: **LCS-26387** Method: **SW7471B**
Analysis Date: **10/02/14 15:30** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	4.9	0.50	4.965	0.000342	98	80	120				

Associated samples: **H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26387** Method: **SW7471B**
Analysis Date: **10/02/14 15:32** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.0	0.50	1	0.000342	103	80	120				

Associated samples: **H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 11** SampType: **Sample Matrix Spike** Lab ID: **H14090233-012AMS** Method: **SW7471B**
Analysis Date: **10/02/14 15:37** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.994	0.00977	110	80	120				

Associated samples: **H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Run ID :Run Order: **HGCV201-H_141002B: 12** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-012AMSD** Method: **SW7471B**
Analysis Date: **10/02/14 15:39** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.994	0.00977	117	80	120	1.099	6.2	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26387

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141002B: 12** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-012AMSD** Method: **SW7471B**

Analysis Date: **10/02/14 15:39** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26427

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141007A: 35** SampType: **Method Blank** Lab ID: **MB-26427** Method: **SW7471B**
Analysis Date: **10/07/14 14:39** Units: **mg/kg** **Prep Info:** Prep Date: **10/6/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005	0.0003									

Associated samples: **H14090234-019A, H14090234-028A**

Run ID :Run Order: **HGCV201-H_141007A: 36** SampType: **Laboratory Control Sample** Lab ID: **LCS-26427** Method: **SW7471B**
Analysis Date: **10/07/14 14:42** Units: **mg/kg** **Prep Info:** Prep Date: **10/6/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.2	0.50	5	0.004861	104	80	120				

Associated samples: **H14090234-019A, H14090234-028A**

Run ID :Run Order: **HGCV201-H_141007A: 37** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26427** Method: **SW7471B**
Analysis Date: **10/07/14 14:44** Units: **mg/kg** **Prep Info:** Prep Date: **10/6/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	1		120	80	120				

Associated samples: **H14090234-019A, H14090234-028A**

Run ID :Run Order: **HGCV201-H_141007A: 69** SampType: **Sample Matrix Spike** Lab ID: **H14090599-001AMS** Method: **SW7471B**
Analysis Date: **10/07/14 17:09** Units: **mg/kg** **Prep Info:** Prep Date: **10/6/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9911	0.04795	104	80	120				

Associated samples: **H14090234-019A, H14090234-028A**

Run ID :Run Order: **HGCV201-H_141007A: 70** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090599-001AMSD** Method: **SW7471B**
Analysis Date: **10/07/14 17:11** Units: **mg/kg** **Prep Info:** Prep Date: **10/6/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	0.9921	0.04795	103	80	120	1.077	0.8	20	

Associated samples: **H14090234-019A, H14090234-028A**

Run ID :Run Order: **HGCV201-H_141007A: 159** SampType: **Sample Matrix Spike** Lab ID: **H14090234-028AMS** Method: **SW7471B**
Analysis Date: **10/07/14 17:37** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.5	0.50	0.9756	0.5261	102	80	120				

Associated samples: **H14090234-019A, H14090234-028A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26427

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141007A: 160** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-028AMSD** Method: **SW7471B**

Analysis Date: **10/07/14 17:40** Units: **mg/kg** **Prep Info:** Prep Date: **10/1/2014** Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.4	0.50	0.9775	0.5261	93	80	120	1.526	6.2	20	

Associated samples: **H14090234-019A, H14090234-028A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 19** SampType: **Method Blank** Lab ID: **MB-26463** Method: **SW6010B**
Analysis Date: **10/09/14 11:44** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.05	0.02									
Cobalt	ND	0.1									
Copper	ND	0.2									
Iron	5	0.6									
Manganese	0.1	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.7	0.09									

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26463** Method: **SW6010B**
Analysis Date: **10/09/14 11:48** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	257	5.0	250		103	80	120				
Barium	51.8	1.0	50	0.054	104	80	120				
Cobalt	48.4	1.0	50		97	80	120				
Copper	51.2	1.0	50		102	80	120				
Iron	253	5.0	250	5.113	99	80	120				
Manganese	248	1.0	250	0.119	99	80	120				
Nickel	48.5	1.0	50		97	80	120				
Vanadium	50.7	1.0	50		101	80	120				
Zinc	51.3	1.0	50	0.682	101	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-26463** Method: **SW6010B**
Analysis Date: **10/09/14 11:52** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11500	5.0	14700		78	50.7	131.3				
Barium	540	1.0	614	0.054	88	80.6	112.2				
Cobalt	50.1	1.0	57.4		87	73.3	103.7				
Copper	244	1.0	280		87	77.5	109.6				
Iron	17800	5.0	23000	5.113	78	39.6	138.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-26463** Method: **SW6010B**
Analysis Date: **10/09/14 11:52** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	386	1.0	369	0.119	104	80.8	115.7				
Nickel	51.4	1.0	61		84	72.3	103.4				
Vanadium	59.1	1.0	73		81	66.6	107.3				
Zinc	190	1.0	213	0.682	89	74.2	109.9				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 24** SampType: **Serial Dilution** Lab ID: **H14090234-049ADIL** Method: **SW6010B**
Analysis Date: **10/09/14 12:02** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12200	16				0	0	11610	4.7	10	
Barium	117	1.0				0	0	110.9	5.3	10	
Cobalt	ND	2.6				0	0	3.188		10	
Copper	101	5.1				0	0	97.52	3.5	10	
Iron	11900	14				0	0	11100	7.3	10	
Manganese	719	1.0				0	0	674.1	6.4	10	
Nickel	5.32	1.6				0	0	6.677		10	N
Vanadium	27.3	3.5				0	0	24.08		10	N
Zinc	452	2.2				0	0	408.3	10	10	R

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 25** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-049APDS** Method: **SW6010B**
Analysis Date: **10/09/14 12:06** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12900	5.0	1203	11610		75	125				A
Barium	335	1.0	240.7	110.9	93	75	125				
Cobalt	212	1.0	240.7	3.188	87	75	125				
Copper	319	1.1	240.7	97.52	92	75	125				
Iron	11800	5.0	1203	11100		75	125				A
Manganese	1710	1.0	1203	674.1	86	75	125				
Nickel	214	1.0	240.7	6.677	86	75	125				
Vanadium	241	1.0	240.7	24.08	90	75	125				
Zinc	638	1.0	240.7	408.3	95	75	125				

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 26** SampType: **Sample Matrix Spike** Lab ID: **H14090234-049AMS** Method: **SW6010B**
Analysis Date: **10/09/14 12:10** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13400	5.0	231.5	11610		75	125				A
Barium	156	1.0	46.3	110.9	98	75	125				
Cobalt	46.9	1.0	46.3	3.188	94	75	125				
Copper	144	1.0	46.3	97.52	99	75	125				
Iron	11600	5.0	231.5	11100		75	125				A
Manganese	883	1.0	231.5	674.1	90	75	125				
Nickel	50.5	1.0	46.3	6.677	95	75	125				
Vanadium	70.8	1.0	46.3	24.08	101	75	125				
Zinc	450	1.0	46.3	408.3		75	125				A

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 29** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-049AMSD** Method: **SW6010B**
Analysis Date: **10/09/14 12:21** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	14000	5.0	231.5	11610		75	125	13430	4.0	20	A
Barium	165	1.0	46.3	110.9	118	75	125	156.3	5.6	20	
Cobalt	47.4	1.0	46.3	3.188	95	75	125	46.89	1.0	20	
Copper	145	1.0	46.3	97.52	102	75	125	143.6	0.8	20	
Iron	12200	5.0	231.5	11100		75	125	11570	5.2	20	A
Manganese	911	1.0	231.5	674.1	102	75	125	882.9	3.1	20	
Nickel	51.1	1.0	46.3	6.677	96	75	125	50.49	1.1	20	
Vanadium	71.0	1.0	46.3	24.08	101	75	125	70.8	0.2	20	
Zinc	467	1.0	46.3	408.3		75	125	450.2	3.6	20	A

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 211** SampType: **Serial Dilution** Lab ID: **H14090234-049BDIL** Method: **SW6010B**
Analysis Date: **10/09/14 12:02** Units: **mg/kg-dry** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	51400	66				0	0	49940	2.9	10	
Barium	494	2.0				0	0	477	3.4	10	
Cobalt	ND	11				0	0	13.72		10	
Copper	427	22				0	0	419.6	1.7	10	
Iron	50400	58				0	0	47740	5.5	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 211** SampType: **Serial Dilution** Lab ID: **H14090234-049BDIL** Method: **SW6010B**
Analysis Date: **10/09/14 12:02** Units: **mg/kg-dry** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	3040	1.8				0	0	2900	4.6	10	
Nickel	22.5	6.9				0	0	28.73		10	N
Vanadium	115	15				0	0	103.6		10	N
Zinc	1910	9.2				0	0	1757	8.2	10	

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 212** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-049BPDS** Method: **SW6010B**
Analysis Date: **10/09/14 12:06** Units: **mg/kg-dry** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	54500	14	5082	49940		75	125				A
Barium	1420	1.0	1016	477	92	75	125				
Cobalt	897	2.3	1016	13.72	87	75	125				
Copper	1350	4.5	1016	419.6	91	75	125				
Iron	49900	12	5082	47740		75	125				A
Manganese	7220	1.0	5082	2900	85	75	125				
Nickel	905	1.4	1016	28.73	86	75	125				
Vanadium	1020	3.0	1016	103.6	90	75	125				
Zinc	2690	1.9	1016	1757	92	75	125				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 213** SampType: **Sample Matrix Spike** Lab ID: **H14090234-049BMS** Method: **SW6010B**
Analysis Date: **10/09/14 12:10** Units: **mg/kg-dry** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	57800	13	995.9	49940		75	125				A
Barium	673	1.0	199.2	477	98	75	125				
Cobalt	202	2.2	199.2	13.72	94	75	125				
Copper	618	4.4	199.2	419.6	99	75	125				
Iron	49800	12	995.9	47740		75	125				A
Manganese	3800	1.0	995.9	2900	90	75	125				
Nickel	217	1.4	199.2	28.73	95	75	125				
Vanadium	305	3.0	199.2	103.6	101	75	125				
Zinc	1940	1.9	199.2	1757		75	125				A

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 216** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-049BMSD** Method: **SW6010B**

Analysis Date: **10/09/14 12:21** Units: **mg/kg-dry** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	60100	13	995.9	49940		75	125	57800	4.0	20	A
Barium	712	1.0	199.2	477	118	75	125	672.7	5.6	20	
Cobalt	204	2.2	199.2	13.72	95	75	125	201.8	1.0	20	
Copper	623	4.4	199.2	419.6	102	75	125	617.6	0.8	20	
Iron	52400	12	995.9	47740		75	125	49790	5.2	20	A
Manganese	3920	1.0	995.9	2900	102	75	125	3799	3.1	20	
Nickel	220	1.4	199.2	28.73	96	75	125	217.2	1.1	20	
Vanadium	305	3.0	199.2	103.6	101	75	125	304.6	0.2	20	
Zinc	2010	1.9	199.2	1757		75	125	1937	3.6	20	A

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 20** SampType: **Method Blank** Lab ID: **MB-26463** Method: **SW6020**
Analysis Date: **10/09/14 14:10** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.6	0.3									
Uranium	ND	0.2									

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-26463** Method: **SW6020**
Analysis Date: **10/09/14 14:15** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	52.2	1.0	126		**41**	2.2	92.9				
Arsenic	296	1.0	343		**86**	72.3	106.4				
Beryllium	46.1	1.0	51		**90**	76.3	108.6				
Boron	72.4	4.3	93.2		**78**	59.4	101.9				
Cadmium	122	1.0	137		**89**	73	105.1				
Chromium	71.1	1.0	76		**94**	72.8	109.1				
Lead	181	1.0	187		**97**	75.9	108.6				
Molybdenum	149	1.0	172		**87**	68.6	105.8				
Selenium	186	1.0	196		**95**	72.5	112.2				
Silver	58.9	1.0	69	0.604	**85**	67.8	112.8				
Uranium	108	1.0	100		**108**	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 22** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26463** Method: **SW6020**
Analysis Date: **10/09/14 14:19** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.9	1.0	50		**98**	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 22** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26463** Method: **SW6020**
Analysis Date: **10/09/14 14:19** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	49.5	1.0	50		99	80	120				
Beryllium	25.6	1.0	25		103	80	120				
Boron	48.8	4.5	50		98	80	120				
Cadmium	25.9	1.0	25		104	80	120				
Chromium	50.4	1.0	50		101	80	120				
Lead	49.3	1.0	50		99	80	120				
Molybdenum	49.4	1.0	50		99	80	120				
Selenium	52.5	1.0	50		105	80	120				
Silver	23.5	1.0	25	0.604	91	80	120				
Uranium	48.6	1.0	50		97	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 25** SampType: **Sample Duplicate** Lab ID: **H14090234-049ADUP** Method: **SW6020**
Analysis Date: **10/09/14 14:32** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.188	1.0						0.1783		20	
Arsenic	9.86	1.0						9.675	1.9	20	
Beryllium	0.531	1.0						0.5565		20	
Boron	4.88	4.1						5.671	15	20	
Cadmium	1.67	1.0						1.651	1.1	20	
Chromium	10.7	1.0						11.11	4.0	20	
Lead	38.1	1.0						36.68	3.8	20	
Molybdenum	0.842	1.0						0.8918		20	
Selenium	0.529	1.0						0.546		20	
Silver	0.638	1.0						0.6935		20	
Uranium	1.24	1.0						1.211	2.1	20	

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 26** SampType: **Serial Dilution** Lab ID: **H14090234-049ADIL** Method: **SW6020**
Analysis Date: **10/09/14 14:37** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0	0.1783		10	
Arsenic	9.85	1.5				0	0	9.675		10	N

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 26** SampType: **Serial Dilution** Lab ID: **H14090234-049ADIL** Method: **SW6020**

Analysis Date: **10/09/14 14:37** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	ND	1.0				0	0	0.5565		10	
Boron	ND	21				0	0	5.671		10	
Cadmium	1.67	1.0				0	0	1.651		10	N
Chromium	10.5	1.0				0	0	11.11	5.6	10	
Lead	36.6	1.1				0	0	36.68	0.4	10	
Molybdenum	0.888	1.0				0	0	0.8918		10	N
Selenium	ND	1.7				0	0	0.546		10	
Silver	ND	1.2				0	0	0.6935		10	
Uranium	1.16	1.0				0	0	1.211		10	N

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 27** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14090234-049APDS** Method: **SW6020**

Analysis Date: **10/09/14 14:41** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2330	1.0	2336	0.1783	100	75	125				
Arsenic	2430	1.0	2336	9.675	103	75	125				
Beryllium	1030	1.0	1168	0.5565	88	75	125				
Boron	2080	4.2	2336	5.671	89	75	125				
Cadmium	1040	1.0	1168	1.651	89	75	125				
Chromium	2340	1.0	2336	11.11	100	75	125				
Lead	2110	1.0	2336	36.68	89	75	125				
Molybdenum	2340	1.0	2336	0.8918	100	75	125				
Selenium	2710	1.0	2336	0.546	116	75	125				
Silver	844	1.0	1168	0.6935	72	75	125				S
Uranium	2710	1.0	2336	1.211	116	75	125				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 28** SampType: **Sample Matrix Spike** Lab ID: **H14090234-049AMS** Method: **SW6020**

Analysis Date: **10/09/14 14:45** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.5	1.0	46.3	0.1783	40	75	125				S
Arsenic	56.1	1.0	46.3	9.675	100	75	125				
Beryllium	24.4	1.0	23.15	0.5565	103	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 28** SampType: **Sample Matrix Spike** Lab ID: **H14090234-049AMS** Method: **SW6020**
Analysis Date: **10/09/14 14:45** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	65.7	4.1	46.3	5.671	130	75	125				S
Cadmium	25.5	1.0	23.15	1.651	103	75	125				
Chromium	58.3	1.0	46.3	11.11	102	75	125				
Lead	83.2	1.0	46.3	36.68	101	75	125				
Molybdenum	48.0	1.0	46.3	0.8918	102	75	125				
Selenium	50.7	1.0	46.3	0.546	108	75	125				
Silver	28.5	1.0	23.15	0.6935	120	75	125				
Uranium	48.8	1.0	46.3	1.211	103	75	125				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 29** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-049AMSD** Method: **SW6020**
Analysis Date: **10/09/14 14:49** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	14.8	1.0	46.3	0.1783	32	75	125	18.47	22	20	SR
Arsenic	56.5	1.0	46.3	9.675	101	75	125	56.09	0.7	20	
Beryllium	23.8	1.0	23.15	0.5565	100	75	125	24.35	2.4	20	
Boron	56.1	4.1	46.3	5.671	109	75	125	65.74	16	20	
Cadmium	25.2	1.0	23.15	1.651	102	75	125	25.46	1.0	20	
Chromium	58.7	1.0	46.3	11.11	103	75	125	58.33	0.6	20	
Lead	82.9	1.0	46.3	36.68	100	75	125	83.24	0.4	20	
Molybdenum	45.2	1.0	46.3	0.8918	96	75	125	48.03	6.2	20	
Selenium	48.4	1.0	46.3	0.546	103	75	125	50.72	4.7	20	
Silver	25.3	1.0	23.15	0.6935	107	75	125	28.47	12	20	
Uranium	46.7	1.0	46.3	1.211	98	75	125	48.75	4.3	20	

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 72** SampType: **Serial Dilution** Lab ID: **H14100178-002ADIL** Method: **SW6020**
Analysis Date: **10/09/14 17:59** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0				0	0			10	
Arsenic	8.73	1.5				0	0	8.46		10	N
Beryllium	ND	1.0				0	0	0.3083		10	
Boron	ND	21				0	0			10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 72** SampType: **Serial Dilution** Lab ID: **H14100178-002ADIL** Method: **SW6020**
Analysis Date: **10/09/14 17:59** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	1.0				0	0			10	
Chromium	7.31	1.0				0	0	7.729		10	N
Lead	2.83	1.1				0	0	2.792		10	N
Molybdenum	ND	1.0				0	0			10	
Selenium	ND	1.7				0	0			10	
Silver	ND	1.3				0	0			10	
Uranium	0.943	1.0				0	0	0.9811		10	N

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 73** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14100178-002APDS** Method: **SW6020**
Analysis Date: **10/09/14 18:04** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2290	1.0	2358		97	75	125				
Arsenic	2610	1.0	2358	8.46	110	75	125				
Beryllium	1050	1.0	1179	0.3083	89	75	125				
Boron	2150	4.2	2358		91	75	125				
Cadmium	1050	1.0	1179		89	75	125				
Chromium	2530	1.0	2358	7.729	107	75	125				
Lead	2170	1.0	2358	2.792	92	75	125				
Molybdenum	2300	1.0	2358		98	75	125				
Selenium	2850	1.0	2358		121	75	125				
Silver	745	1.0	1179		63	75	125				S
Uranium	2780	1.0	2358	0.9811	118	75	125				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 74** SampType: **Sample Matrix Spike** Lab ID: **H14100178-002AMS** Method: **SW6020**
Analysis Date: **10/09/14 18:07** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	22.4	1.0	47.62		47	75	125				S
Arsenic	56.9	1.0	47.62	8.46	102	75	125				
Beryllium	24.1	1.0	23.81	0.3083	100	75	125				
Boron	62.8	4.3	47.62		132	75	125				S
Cadmium	23.8	1.0	23.81		100	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 74** SampType: **Sample Matrix Spike** Lab ID: **H14100178-002AMS** Method: **SW6020**
Analysis Date: **10/09/14 18:07** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	57.8	1.0	47.62	7.729	105	75	125				
Lead	51.5	1.0	47.62	2.792	102	75	125				
Molybdenum	48.9	1.0	47.62		103	75	125				
Selenium	51.9	1.0	47.62		109	75	125				
Silver	27.8	1.0	23.81		117	75	125				
Uranium	51.2	1.0	47.62	0.9811	105	75	125				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141009B: 75** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14100178-002AMSD** Method: **SW6020**
Analysis Date: **10/09/14 18:12** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	19.8	1.0	47.17		42	75	125	22.38	12	20	S
Arsenic	73.7	1.0	47.17	8.46	138	75	125	56.86	26	20	SR
Beryllium	24.0	1.0	23.58	0.3083	100	75	125	24.14	0.8	20	
Boron	51.5	4.2	47.17		109	75	125	62.76	20	20	
Cadmium	23.2	1.0	23.58		98	75	125	23.81	2.7	20	
Chromium	58.0	1.0	47.17	7.729	107	75	125	57.83	0.4	20	
Lead	50.0	1.0	47.17	2.792	100	75	125	51.48	2.8	20	
Molybdenum	46.5	1.0	47.17		99	75	125	48.93	5.1	20	
Selenium	49.7	1.0	47.17		105	75	125	51.93	4.4	20	
Silver	25.4	1.0	23.58		107	75	125	27.81	9.2	20	
Uranium	48.1	1.0	47.17	0.9811	100	75	125	51.17	6.2	20	

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICPMS204-B_141010A: 18** SampType: **Method Blank** Lab ID: **MB-26463** Method: **SW6020**
Analysis Date: **10/10/14 11:53** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Beryllium	ND	0.2									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	0.3	0.2									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26463

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141010A: 18** SampType: **Method Blank** Lab ID: **MB-26463** Method: **SW6020**

Analysis Date: **10/10/14 11:53** Units: **mg/kg** **Prep Info:** Prep Date: **10/7/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	0.3	0.3									
Uranium	ND	0.2									

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26472

Date: *16-Oct-14*

Run ID :Run Order: **HGCV201-H_141009A: 4** SampType: **Method Blank** Lab ID: **MB-26472** Method: **SW7471B**
Analysis Date: **10/09/14 09:35** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004	0.0003									

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **HGCV201-H_141009A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-26472** Method: **SW7471B**
Analysis Date: **10/09/14 09:37** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.4	0.50	5	0.003503	108	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **HGCV201-H_141009A: 6** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-26472** Method: **SW7471B**
Analysis Date: **10/09/14 09:40** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1	0.003503	114	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **HGCV201-H_141009A: 9** SampType: **Sample Matrix Spike** Lab ID: **H14100178-001AMS** Method: **SW7471B**
Analysis Date: **10/09/14 09:47** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	1.006	0.1053	119	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **HGCV201-H_141009A: 10** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14100178-001AMSD** Method: **SW7471B**
Analysis Date: **10/09/14 09:49** Units: **mg/kg** **Prep Info:** Prep Date: **10/8/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	1.006	0.1053	117	80	120	1.3	1.1	20	

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26523

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_141014A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-26523** Method: **A4500 N-C**
Analysis Date: **10/14/14 09:50** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	14.5	0.30	15.2		95	90	110				

Associated samples: **H14090234-005A**

Run ID :Run Order: **FIA203-HE_141014A: 12** SampType: **Method Blank** Lab ID: **MB-26523** Method: **A4500 N-C**
Analysis Date: **10/14/14 09:51** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14090234-005A**

Run ID :Run Order: **FIA203-HE_141014A: 14** SampType: **Sample Matrix Spike** Lab ID: **H14090214-019BMS** Method: **A4500 N-C**
Analysis Date: **10/14/14 09:54** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.833	0.10	1		83	90	110				S

Associated samples: **H14090234-005A**

Run ID :Run Order: **FIA203-HE_141014A: 15** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090214-019BMSD** Method: **A4500 N-C**
Analysis Date: **10/14/14 09:55** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.874	0.10	1		87	90	110	0.8327	4.8	20	S

Associated samples: **H14090234-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 26544

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141014A: 21** SampType: **Method Blank** Lab ID: **MB-26544** Method: **E200.8**
Analysis Date: **10/14/14 12:00** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	3E-05									

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 22** SampType: **Laboratory Control Sample** Lab ID: **LCS-26544** Method: **E200.8**
Analysis Date: **10/14/14 12:04** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.529	0.0010	0.5		106	85	115				

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14100262-001AMS3** Method: **E200.8**
Analysis Date: **10/14/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.519	0.0010	0.5	0.0000384	104	70	130				

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14100262-001AMSD3** Method: **E200.8**
Analysis Date: **10/14/14 12:30** Units: **mg/L** **Prep Info:** Prep Date: **10/13/2014** Prep Method: **E200.2**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.531	0.0010	0.5	0.0000384	106	70	130	0.5192	2.2	20	

Associated samples: **H14090234-013C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100503

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140912B: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **09/12/14 14:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.03	0.010	1		103	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **09/12/14 14:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.925	0.011	1		93	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **09/12/14 14:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	-0.0129	0.010				0	0				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **09/12/14 14:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	ND	0.001									

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 69** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **09/12/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.462	0.010	0.5		92	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100503

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140912B: 69** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **09/12/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 71** SampType: **Sample Matrix Spike** Lab ID: **H14090221-002BMS** Method: **E353.2**
Analysis Date: **09/12/14 15:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.936	0.011	1	0.03898	90	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 72** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090221-002BMSD** Method: **E353.2**
Analysis Date: **09/12/14 15:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.919	0.011	1	0.03898	88	90	110	0.9361	1.8	20	S

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 83** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **09/12/14 15:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.467	0.010	0.5		93	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 91** SampType: **Sample Matrix Spike** Lab ID: **H14090234-013DMS** Method: **E353.2**
Analysis Date: **09/12/14 16:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.981	0.011	1	0.02595	96	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100503

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140912B: 92** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-013DMSD** Method: **E353.2**
Analysis Date: **09/12/14 16:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.926	0.011	1	0.02595	90	90	110	0.9812	5.8	20	

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 97** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **09/12/14 16:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.462	0.010	0.5		92	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 99** SampType: **Sample Matrix Spike** Lab ID: **H14090234-017DMS** Method: **E353.2**
Analysis Date: **09/12/14 16:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	3.31	0.022	2	1.358	98	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 100** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-017DMSD** Method: **E353.2**
Analysis Date: **09/12/14 16:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	3.30	0.022	2	1.358	97	90	110	3.311	0.3	20	

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 111** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **09/12/14 16:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.461	0.010	0.5		92	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100503

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140912B: 111** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**

Analysis Date: **09/12/14 16:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 113** SampType: **Sample Matrix Spike** Lab ID: **H14090234-009DMS** Method: **E353.2**

Analysis Date: **09/12/14 16:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	7.19	0.055	5	2.711	90	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140912B: 114** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-009DMSD** Method: **E353.2**

Analysis Date: **09/12/14 16:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	7.01	0.055	5	2.711	86	90	110	7.194	2.6	20	S

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100537

Date: *16-Oct-14*

Run ID :Run Order: **PHSC_101-H_140915A: 88** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **09/15/14 17:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	2	2									

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 90** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **09/15/14 17:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	590	4.0	600	2.12	99	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 93** SampType: **Sample Duplicate** Lab ID: **H14070369-003ADUP** Method: **A2320 B**
Analysis Date: **09/15/14 17:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	99	4.0						97.15	1.7	10	
Bicarbonate as HCO3	120	4.0						117.9	1.7	10	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 101** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001AMS** Method: **A2320 B**
Analysis Date: **09/15/14 18:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	670	4.0	600	100.3	94	80	120				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 134** SampType: **Sample Duplicate** Lab ID: **H14090234-014ADUP** Method: **A2320 B**
Analysis Date: **09/15/14 20:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	100	4.0						98.75	1.4	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100537

Date: *16-Oct-14*

Run ID :Run Order: **PHSC_101-H_140915A: 134** SampType: **Sample Duplicate** Lab ID: **H14090234-014ADUP** Method: **A2320 B**
Analysis Date: **09/15/14 20:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bicarbonate as HCO3	110	4.0						111.2	1.7	10	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 136** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **09/15/14 20:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	4	2									

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 138** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **09/15/14 20:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	600	4.0	600	3.75	99	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 141** SampType: **Sample Duplicate** Lab ID: **H14090234-015ADUP** Method: **A2320 B**
Analysis Date: **09/15/14 20:44** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	100	4.0						99.65	1.3	10	
Bicarbonate as HCO3	120	4.0						113.8	1.8	10	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 145** SampType: **Sample Matrix Spike** Lab ID: **H14090234-016AMS** Method: **A2320 B**
Analysis Date: **09/15/14 20:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	610	4.0	600	104.4	84	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100537

Date: *16-Oct-14*

Run ID :Run Order: **PHSC_101-H_140915A: 145** SampType: **Sample Matrix Spike** Lab ID: **H14090234-016AMS** Method: **A2320 B**

Analysis Date: **09/15/14 20:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **PHSC_101-H_140915A: 174** SampType: **Sample Duplicate** Lab ID: **H14090241-012ADUP** Method: **A2320 B**

Analysis Date: **09/15/14 22:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	ND	4.0								10	
Bicarbonate as HCO3	1.7	4.0						1.854		10	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **09/15/14 10:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.797	0.10	0.8		100	95	105				
Calcium	40.2	1.0	40		101	95	105				
Magnesium	40.7	1.0	40		102	95	105				
Potassium	40.5	1.0	40		101	95	105				
Sodium	40.5	1.0	40		101	95	105				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **09/15/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.60	0.10	2.5		104	95	105				
Calcium	25.5	1.0	25		102	95	105				
Magnesium	25.6	1.0	25		102	95	105				
Potassium	24.8	1.0	25		99	95	105				
Sodium	24.9	1.0	25		100	95	105				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **09/15/14 10:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.00368	0.10				0	0				
Calcium	474	1.0	500		95	80	120				
Magnesium	514	1.0	500		103	80	120				
Potassium	-0.302	1.0				0	0				
Sodium	-0.00284	1.0				0	0				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **09/15/14 10:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.999	0.10	1		100	80	120				
Calcium	476	1.0	500		95	80	120				
Magnesium	512	1.0	500		102	80	120				
Potassium	20.0	1.0	20		100	80	120				
Sodium	20.2	1.0	20		101	80	120				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**

Analysis Date: **09/15/14 10:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.05	0.03									
Magnesium	ND	0.02									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**

Analysis Date: **09/15/14 11:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.941	0.10	1		94	85	115				
Calcium	46.8	1.0	50	0.04577	94	85	115				
Magnesium	47.1	1.0	50		94	85	115				
Potassium	48.2	1.0	50		96	85	115				
Sodium	48.6	1.0	50		97	85	115				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 31** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/15/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.55	0.10	2.5		102	90	110				
Calcium	24.5	1.0	25		98	90	110				
Magnesium	24.4	1.0	25		98	90	110				
Potassium	24.9	1.0	25		100	90	110				
Sodium	25.3	1.0	25		101	90	110				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14090233-001BMS2** Method: **E200.7**

Analysis Date: **09/15/14 12:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.01	0.050	1	0.01765	99	70	130				
Calcium	83.0	1.0	50	34.16	98	70	130				
Magnesium	57.5	1.0	50	8.286	98	70	130				
Potassium	53.9	1.0	50	2.539	103	70	130				
Sodium	63.7	1.0	50	12.14	103	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-001BMSD2** Method: **E200.7**

Analysis Date: **09/15/14 12:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.01	0.050	1	0.01765	100	70	130	1.006	0.9	20	
Calcium	83.2	1.0	50	34.16	98	70	130	82.95	0.2	20	
Magnesium	57.8	1.0	50	8.286	99	70	130	57.46	0.6	20	
Potassium	53.6	1.0	50	2.539	102	70	130	53.88	0.6	20	
Sodium	63.5	1.0	50	12.14	103	70	130	63.67	0.3	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/15/14 12:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.48	0.10	2.5		99	90	110				
Calcium	24.3	1.0	25		97	90	110				
Magnesium	24.4	1.0	25		98	90	110				
Potassium	25.0	1.0	25		100	90	110				
Sodium	25.4	1.0	25		102	90	110				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 48** SampType: **Sample Matrix Spike** Lab ID: **H14090234-008BMS2** Method: **E200.7**

Analysis Date: **09/15/14 13:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.06	0.050	1	0.07169	98	70	130				
Calcium	105	1.0	50	57.88	94	70	130				
Magnesium	59.9	1.0	50	12.6	95	70	130				
Potassium	57.8	1.0	50	6.49	103	70	130				
Sodium	88.3	1.0	50	35.81	105	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 49** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-008BMSD2** Method: **E200.7**

Analysis Date: **09/15/14 13:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.04	0.050	1	0.07169	97	70	130	1.055	1.5	20	
Calcium	104	1.0	50	57.88	93	70	130	104.8	0.3	20	
Magnesium	59.6	1.0	50	12.6	94	70	130	59.87	0.5	20	
Potassium	56.3	1.0	50	6.49	100	70	130	57.83	2.8	20	
Sodium	86.1	1.0	50	35.81	101	70	130	88.28	2.5	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100549

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140915A: 55** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/15/14 13:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.43	0.10	2.5		97	90	110				
Calcium	24.1	1.0	25		96	90	110				
Magnesium	24.0	1.0	25		96	90	110				
Potassium	24.5	1.0	25		98	90	110				
Sodium	25.1	1.0	25		100	90	110				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 63** SampType: **Sample Matrix Spike** Lab ID: **H14090234-018BMS2** Method: **E200.7**

Analysis Date: **09/15/14 14:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.03	0.050	1	0.06215	97	70	130				
Calcium	99.2	1.0	50	53.91	91	70	130				
Magnesium	58.4	1.0	50	11.6	94	70	130				
Potassium	56.9	1.0	50	5.353	103	70	130				
Sodium	84.5	1.0	50	31.72	106	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICP2-HE_140915A: 64** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-018BMSD2** Method: **E200.7**

Analysis Date: **09/15/14 14:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.03	0.050	1	0.06215	97	70	130	1.029	0.5	20	
Calcium	99.5	1.0	50	53.91	91	70	130	99.22	0.3	20	
Magnesium	58.6	1.0	50	11.6	94	70	130	58.41	0.4	20	
Potassium	56.1	1.0	50	5.353	102	70	130	56.86	1.3	20	
Sodium	83.2	1.0	50	31.72	103	70	130	84.53	1.5	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100567

Date: *16-Oct-14*

Run ID :Run Order: **FIA202-HE_140915A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**
Analysis Date: **09/15/14 15:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.250	0.010	0.25		100	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Run ID :Run Order: **FIA202-HE_140915A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**
Analysis Date: **09/15/14 15:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-0.000600	0.010				0	0				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Run ID :Run Order: **FIA202-HE_140915A: 56** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **09/15/14 15:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.106	0.010	0.1		106	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Run ID :Run Order: **FIA202-HE_140915A: 70** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **09/15/14 16:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.108	0.010	0.1		107	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100569

Date: *16-Oct-14*

Run ID :Run Order: **IC102-H_140915A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**

Analysis Date: **09/15/14 14:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		101	90	110				
Sulfate	400	1.0	400		100	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**

Analysis Date: **09/15/14 14:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	0.008									
Sulfate	ND	0.08									

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**

Analysis Date: **09/15/14 15:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	48	1.0	50		96	90	110				
Sulfate	200	1.0	200		98	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 29** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV091514-2** Method: **E300.0**

Analysis Date: **09/15/14 17:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		101	90	110				
Sulfate	400	1.0	400		101	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100569

Date: *16-Oct-14*

Run ID :Run Order: **IC102-H_140915A: 32** SampType: **Sample Matrix Spike** Lab ID: **H14090234-001AMS** Method: **E300.0**
Analysis Date: **09/15/14 18:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	79	1.0	50	26.59	104	90	110				
Sulfate	320	1.0	200	102	107	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-001AMSD** Method: **E300.0**
Analysis Date: **09/15/14 18:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	79	1.0	50	26.59	105	90	110	78.8	0.3	20	
Sulfate	320	1.0	200	102	109	90	110	316	1.4	20	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV091514-3** Method: **E300.0**
Analysis Date: **09/15/14 20:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100		102	90	110				
Sulfate	410	1.0	400		102	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 46** SampType: **Sample Matrix Spike** Lab ID: **H14090234-011AMS** Method: **E300.0**
Analysis Date: **09/15/14 20:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	50	51.44	104	90	110				
Sulfate	310	1.0	200	101.5	106	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100569

Date: *16-Oct-14*

Run ID :Run Order: **IC102-H_140915A: 47** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-011AMSD** Method: **E300.0**

Analysis Date: **09/15/14 21:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	50	51.44	104	90	110	103.3	0.2	20	
Sulfate	320	1.0	200	101.5	109	90	110	313.4	2.2	20	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 60** SampType: **Sample Matrix Spike** Lab ID: **H14090241-003AMS** Method: **E300.0**

Analysis Date: **09/15/14 23:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	50	1.0	50	1.122	98	90	110				
Sulfate	490	1.0	200	272.4	107	90	110				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **IC102-H_140915A: 61** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090241-003AMSD** Method: **E300.0**

Analysis Date: **09/15/14 23:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	51	1.0	50	1.122	100	90	110	49.94	1.9	20	
Sulfate	490	1.0	200	272.4	108	90	110	485.8	0.6	20	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100588

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140916A: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **09/16/14 11:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	14.3	0.50	15.2		94	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Run ID :Run Order: **FIA203-HE_140916A: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **09/16/14 11:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.935	0.055	1		93	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Run ID :Run Order: **FIA203-HE_140916A: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **09/16/14 11:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0631	0.050				0	0				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Run ID :Run Order: **FIA203-HE_140916A: 24** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **09/16/14 11:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.465	0.050	0.5		93	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Run ID :Run Order: **FIA203-HE_140916A: 27** SampType: **Sample Matrix Spike** Lab ID: **H14090233-003DMS** Method: **E350.1**
Analysis Date: **09/16/14 11:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.876	0.055	1		88	80	120				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100588

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140916A: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090233-003DMSD** Method: **E350.1**

Analysis Date: **09/16/14 11:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.844	0.055	1		84	80	120	0.8759	3.7	10	

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Run ID :Run Order: **FIA203-HE_140916A: 45** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**

Analysis Date: **09/16/14 11:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.463	0.050	0.5		93	90	110				

Associated samples: **H14090234-001D, H14090234-002D, H14090234-003D, H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100597

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **09/16/14 08:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.782	0.10	0.8		98	95	105				
Calcium	39.2	1.0	40		98	95	105				
Magnesium	39.0	1.0	40		97	95	105				
Potassium	38.5	1.0	40		96	95	105				
Sodium	38.8	1.0	40		97	95	105				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **09/16/14 08:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.46	0.10	2.5		98	95	105				
Calcium	24.9	1.0	25		100	95	105				
Magnesium	24.7	1.0	25		99	95	105				
Potassium	24.8	1.0	25		99	95	105				
Sodium	25.1	1.0	25		100	95	105				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **09/16/14 08:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.00349	0.10				0	0				
Calcium	465	1.0	500		93	80	120				
Magnesium	491	1.0	500		98	80	120				
Potassium	-0.215	1.0				0	0				
Sodium	0.0307	1.0				0	0				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100597

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **09/16/14 08:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.02	0.10	1		102	80	120				
Calcium	462	1.0	500		92	80	120				
Magnesium	492	1.0	500		98	80	120				
Potassium	19.2	1.0	20		96	80	120				
Sodium	19.6	1.0	20		98	80	120				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/16/14 13:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.44	0.10	2.5		98	90	110				
Calcium	25.0	1.0	25		100	90	110				
Magnesium	24.9	1.0	25		100	90	110				
Potassium	24.6	1.0	25		98	90	110				
Sodium	24.6	1.0	25		99	90	110				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICP2-HE_140916B: 55** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/16/14 14:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.47	0.10	2.5		99	90	110				
Calcium	24.7	1.0	25		99	90	110				
Magnesium	24.4	1.0	25		98	90	110				
Potassium	25.1	1.0	25		100	90	110				
Sodium	25.3	1.0	25		101	90	110				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100597

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140916B: 67** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **09/16/14 15:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.41	0.10	2.5		96	90	110				
Calcium	24.8	1.0	25		99	90	110				
Magnesium	24.7	1.0	25		99	90	110				
Potassium	24.9	1.0	25		100	90	110				
Sodium	25.3	1.0	25		101	90	110				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-005C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-011C, H14090234-012C, H14090234-013C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100598

Date: *16-Oct-14*

Run ID :Run Order: **FIA202-HE_140916A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**
Analysis Date: **09/16/14 13:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.251	0.010	0.25		100	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **09/16/14 13:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.102	0.010	0.1		102	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**
Analysis Date: **09/16/14 13:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.00190	0.010				0	0				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA202-HE_140916A: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **09/16/14 13:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.105	0.010	0.1		105	90	110				

Associated samples: **H14090234-004D, H14090234-005D, H14090234-006D, H14090234-007D, H14090234-008D, H14090234-009D, H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100599

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140916B: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **09/16/14 14:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	14.3	0.50	15.2		94	90	110				

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140916B: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **09/16/14 14:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.923	0.055	1		92	90	110				

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140916B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **09/16/14 14:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.499	0.050	0.5		100	90	110				

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140916B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **09/16/14 14:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0576	0.050				0	0				

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140916B: 12** SampType: **Sample Matrix Spike** Lab ID: **H14090234-010DMS** Method: **E350.1**
Analysis Date: **09/16/14 14:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.955	0.055	1		96	80	120				

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100599

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140916B: 13** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-010DMSD** Method: **E350.1**

Analysis Date: **09/16/14 14:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.951	0.055	1		95	80	120	0.9554	0.5	10	

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140916B: 27** SampType: **Sample Matrix Spike** Lab ID: **H14090273-002CMS** Method: **E350.1**

Analysis Date: **09/16/14 14:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.721	0.055	1		72	80	120				S

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Run ID :Run Order: **FIA203-HE_140916B: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090273-002CMSD** Method: **E350.1**

Analysis Date: **09/16/14 14:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.685	0.055	1		68	80	120	0.7212	5.2	10	S

Associated samples: **H14090234-010D, H14090234-011D, H14090234-012D, H14090234-013D, H14090234-014D, H14090234-015D, H14090234-016D, H14090234-017D, H14090234-018D**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **09/17/14 11:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.301	0.10	0.3		100	90	110				
Antimony	0.0608	0.050	0.06		101	90	110				
Arsenic	0.0617	0.0050	0.06		103	90	110				
Barium	0.0599	0.10	0.06		100	90	110				
Beryllium	0.0302	0.0010	0.03		101	90	110				
Cadmium	0.0317	0.0010	0.03		106	90	110				
Chromium	0.0626	0.010	0.06		104	90	110				
Cobalt	0.0605	0.010	0.06		101	90	110				
Copper	0.0633	0.010	0.06		105	90	110				
Iron	0.324	0.020	0.3		108	90	110				
Lead	0.0595	0.010	0.06		99	90	110				
Manganese	0.299	0.010	0.3		100	90	110				
Molybdenum	0.0606	0.0050	0.06		101	90	110				
Nickel	0.0633	0.010	0.06		105	90	110				
Selenium	0.0629	0.0050	0.06		105	90	110				
Silver	0.0301	0.0050	0.03		100	90	110				
Uranium	0.0601	0.0010	0.06		100	90	110				
Vanadium	0.0610	0.10	0.06		102	90	110				
Zinc	0.0636	0.010	0.06		106	90	110				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B, H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C, H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/17/14 11:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.7	0.10	40		94	70	130				
Antimony	7.60E-05	0.050									
Arsenic	7.10E-05	0.0050									
Barium	0.000121	0.10									
Beryllium	1.00E-05	0.0010									
Cadmium	0.000509	0.0010									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/17/14 11:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.00108	0.010									
Cobalt	0.000212	0.010									
Copper	0.000371	0.010									
Iron	99.3	0.020	100		99	70	130				
Lead	0.000241	0.010									
Manganese	-0.000145	0.010									
Molybdenum	0.834	0.0050	0.8		104	70	130				
Nickel	0.000656	0.010									
Selenium	0.000132	0.0050									
Silver	0.000157	0.0050									
Uranium	3.70E-05	0.0010									
Vanadium	7.90E-05	0.10									
Zinc	0.00152	0.010									

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B, H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C, H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/17/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.1	0.10	40		93	70	130				
Antimony	0.000578	0.050				0	0				
Arsenic	0.0106	0.0050	0.01		106	70	130				
Barium	0.000147	0.10				0	0				
Beryllium	7.00E-06	0.0010				0	0				
Cadmium	0.00976	0.0010	0.01		98	70	130				
Chromium	0.0211	0.010	0.02		105	70	130				
Cobalt	0.0196	0.010	0.02		98	70	130				
Copper	0.0201	0.010	0.02		101	70	130				
Iron	97.3	0.020	100		97	70	130				
Lead	0.000258	0.010				0	0				
Manganese	0.0191	0.010	0.02		96	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/17/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.820	0.0050	0.8		102	70	130				
Nickel	0.0207	0.010	0.02		103	70	130				
Selenium	0.0120	0.0050	0.01		120	70	130				
Silver	0.0177	0.0050	0.02		89	70	130				
Uranium	1.80E-05	0.0010				0	0				
Vanadium	0.0205	0.10	0.02		103	70	130				
Zinc	0.0119	0.010	0.01		119	70	130				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B, H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C, H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 18** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **09/17/14 13:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	ND	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	ND	3E-05									
Iron	0.0007	0.0002									
Lead	ND	8E-06									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 18** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **09/17/14 13:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	ND	0.0003									

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICPMS204-B_140917A: 19** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **09/17/14 13:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0503	0.10	0.05		101	85	115				
Antimony	0.0496	0.050	0.05		99	85	115				
Arsenic	0.0518	0.0050	0.05		104	85	115				
Barium	0.0506	0.10	0.05		101	85	115				
Beryllium	0.0505	0.0010	0.05		101	85	115				
Cadmium	0.0520	0.0010	0.05		104	85	115				
Chromium	0.0514	0.010	0.05		103	85	115				
Cobalt	0.0512	0.010	0.05		102	85	115				
Copper	0.0523	0.010	0.05		105	85	115				
Iron	0.161	0.020	0.15	0.0006622	107	85	115				
Lead	0.0502	0.010	0.05		100	85	115				
Manganese	0.0508	0.010	0.05		102	85	115				
Molybdenum	0.0504	0.0050	0.05		101	85	115				
Nickel	0.0523	0.010	0.05		105	85	115				
Selenium	0.0539	0.0050	0.05		108	85	115				
Silver	0.0208	0.0050	0.02		104	85	115				
Uranium	0.0488	0.0010	0.05		98	85	115				
Vanadium	0.0503	0.10	0.05		101	85	115				
Zinc	0.0554	0.010	0.05		111	85	115				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 130** SampType: **Sample Matrix Spike** Lab ID: **H14090221-002CMS** Method: **E200.8**

Analysis Date: **09/17/14 23:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.107	0.030	0.05	0.05811	97	70	130				
Antimony	0.0711	0.0010	0.05	0.02417	94	70	130				
Arsenic	0.0560	0.0010	0.05	0.002202	108	70	130				
Barium	0.0715	0.050	0.05	0.02258	98	70	130				
Beryllium	0.0500	0.0010	0.05		100	70	130				
Cadmium	0.0498	0.0010	0.05	0.000513	99	70	130				
Chromium	0.0509	0.0050	0.05	0.0000618	102	70	130				
Cobalt	0.0491	0.0050	0.05	0.0006083	97	70	130				
Copper	0.0628	0.0050	0.05	0.01147	103	70	130				
Iron	0.236	0.020	0.15	0.08608	100	70	130				
Lead	0.0618	0.0010	0.05	0.01244	99	70	130				
Manganese	0.455	0.0010	0.05	0.4222		70	130				A
Molybdenum	0.199	0.0010	0.05	0.1548	89	70	130				
Nickel	0.0532	0.0050	0.05	0.002231	102	70	130				
Selenium	0.0539	0.0010	0.05	0.0005069	107	70	130				
Silver	0.0162	0.0010	0.02	0.0000496	81	70	130				
Uranium	0.0507	0.00030	0.05	0.000849	100	70	130				
Vanadium	0.0517	0.010	0.05	0.0004564	102	70	130				
Zinc	0.101	0.010	0.05	0.04832	105	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICPMS204-B_140917A: 131** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090221-002CMSD** Method: **E200.8**

Analysis Date: **09/17/14 23:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.102	0.030	0.05	0.05811	88	70	130	0.1066	4.1	20	
Antimony	0.0720	0.0010	0.05	0.02417	96	70	130	0.07113	1.2	20	
Arsenic	0.0558	0.0010	0.05	0.002202	107	70	130	0.05596	0.3	20	
Barium	0.0712	0.050	0.05	0.02258	97	70	130	0.07147	0.4	20	
Beryllium	0.0504	0.0010	0.05		101	70	130	0.04997	1.0	20	
Cadmium	0.0505	0.0010	0.05	0.000513	100	70	130	0.04983	1.3	20	
Chromium	0.0512	0.0050	0.05	0.0000618	102	70	130	0.05091	0.6	20	
Cobalt	0.0495	0.0050	0.05	0.0006083	98	70	130	0.0491	0.8	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 131** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090221-002CMSD** Method: **E200.8**

Analysis Date: **09/17/14 23:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0628	0.0050	0.05	0.01147	103	70	130	0.06276	0.0	20	
Iron	0.233	0.020	0.15	0.08608	98	70	130	0.2355	1.2	20	
Lead	0.0619	0.0010	0.05	0.01244	99	70	130	0.06175	0.3	20	
Manganese	0.459	0.0010	0.05	0.4222		70	130	0.4553	0.8	20	A
Molybdenum	0.199	0.0010	0.05	0.1548	88	70	130	0.1992	0.2	20	
Nickel	0.0536	0.0050	0.05	0.002231	103	70	130	0.05325	0.7	20	
Selenium	0.0543	0.0010	0.05	0.0005069	108	70	130	0.0539	0.8	20	
Silver	0.0161	0.0010	0.02	0.0000496	80	70	130	0.01621	0.6	20	
Uranium	0.0515	0.00030	0.05	0.000849	101	70	130	0.05073	1.6	20	
Vanadium	0.0517	0.010	0.05	0.0004564	103	70	130	0.05166	0.1	20	
Zinc	0.0993	0.010	0.05	0.04832	102	70	130	0.1006	1.3	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICPMS204-B_140917A: 150** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/18/14 00:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.2	0.10	40		93	70	130				
Antimony	3.00E-05	0.050									
Arsenic	9.90E-05	0.0050									
Barium	0.000114	0.10									
Beryllium	-2.00E-06	0.0010									
Cadmium	0.000509	0.0010									
Chromium	0.00104	0.010									
Cobalt	0.000234	0.010									
Copper	0.000407	0.010									
Iron	97.5	0.020	100		98	70	130				
Lead	0.000235	0.010									
Manganese	-0.000243	0.010									
Molybdenum	0.823	0.0050	0.8		103	70	130				
Nickel	0.000644	0.010									
Selenium	6.80E-05	0.0050									
Silver	6.80E-05	0.0050									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 150** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/18/14 00:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	5.00E-06	0.0010									
Vanadium	0.000113	0.10									
Zinc	0.00163	0.010									

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B, H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C, H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 151** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/18/14 00:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	36.6	0.10	40		91	70	130				
Antimony	0.000548	0.050				0	0				
Arsenic	0.0113	0.0050	0.01		113	70	130				
Barium	0.000117	0.10				0	0				
Beryllium	-1.30E-05	0.0010				0	0				
Cadmium	0.00998	0.0010	0.01		100	70	130				
Chromium	0.0216	0.010	0.02		108	70	130				
Cobalt	0.0196	0.010	0.02		98	70	130				
Copper	0.0208	0.010	0.02		104	70	130				
Iron	100	0.020	100		100	70	130				
Lead	0.000254	0.010				0	0				
Manganese	0.0186	0.010	0.02		93	70	130				
Molybdenum	0.827	0.0050	0.8		103	70	130				
Nickel	0.0213	0.010	0.02		106	70	130				
Selenium	0.0124	0.0050	0.01		124	70	130				
Silver	0.0178	0.0050	0.02		89	70	130				
Uranium	6.00E-06	0.0010				0	0				
Vanadium	0.0208	0.10	0.02		104	70	130				
Zinc	0.0115	0.010	0.01		115	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 151** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/18/14 00:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C, H14090234-005B, H14090234-005C, H14090234-006B, H14090234-006C, H14090234-007B, H14090234-007C, H14090234-008B, H14090234-008C, H14090234-009B, H14090234-009C, H14090234-010B, H14090234-010C, H14090234-011B, H14090234-011C, H14090234-012B, H14090234-012C, H14090234-013B, H14090234-013C, H14090234-014B, H14090234-014C, H14090234-015B, H14090234-015C, H14090234-016B, H14090234-016C, H14090234-017B, H14090234-017C, H14090234-018B, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140917A: 183** SampType: **Sample Matrix Spike** Lab ID: **H14090234-006BMS** Method: **E200.8**

Analysis Date: **09/18/14 04:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0498	0.030	0.05	0.002893	94	70	130				
Antimony	0.0488	0.0010	0.05	0.000237	97	70	130				
Arsenic	0.0587	0.0010	0.05	0.00525	107	70	130				
Barium	0.0897	0.050	0.05	0.03861	102	70	130				
Beryllium	0.0510	0.0010	0.05		102	70	130				
Cadmium	0.0524	0.0010	0.05	0.0001308	105	70	130				
Chromium	0.0506	0.0050	0.05		101	70	130				
Cobalt	0.0490	0.0050	0.05	0.0001373	98	70	130				
Copper	0.0659	0.0050	0.05	0.01521	101	70	130				
Iron	0.198	0.020	0.15	0.04959	99	70	130				
Lead	0.0502	0.0010	0.05	0.0002805	100	70	130				
Manganese	0.0852	0.0010	0.05	0.03519	100	70	130				
Molybdenum	0.0547	0.0010	0.05	0.005244	99	70	130				
Nickel	0.0514	0.0050	0.05	0.0007079	101	70	130				
Selenium	0.0528	0.0010	0.05	0.0001408	105	70	130				
Silver	0.0176	0.0010	0.02		88	70	130				
Uranium	0.0559	0.00030	0.05	0.004777	102	70	130				
Vanadium	0.0519	0.010	0.05	0.001815	100	70	130				
Zinc	0.0779	0.010	0.05	0.02659	103	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 184** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-006BMSD** Method: **E200.8**

Analysis Date: **09/18/14 04:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0486	0.030	0.05	0.002893	91	70	130	0.0498	2.4	20	
Antimony	0.0504	0.0010	0.05	0.000237	100	70	130	0.04879	3.2	20	
Arsenic	0.0597	0.0010	0.05	0.00525	109	70	130	0.05869	1.7	20	
Barium	0.0901	0.050	0.05	0.03861	103	70	130	0.08972	0.4	20	
Beryllium	0.0502	0.0010	0.05		100	70	130	0.05096	1.5	20	
Cadmium	0.0518	0.0010	0.05	0.0001308	103	70	130	0.0524	1.2	20	
Chromium	0.0509	0.0050	0.05		102	70	130	0.05055	0.7	20	
Cobalt	0.0493	0.0050	0.05	0.0001373	98	70	130	0.04897	0.6	20	
Copper	0.0664	0.0050	0.05	0.01521	102	70	130	0.06592	0.8	20	
Iron	0.206	0.020	0.15	0.04959	104	70	130	0.198	4.0	20	
Lead	0.0506	0.0010	0.05	0.0002805	101	70	130	0.05022	0.7	20	
Manganese	0.0863	0.0010	0.05	0.03519	102	70	130	0.08523	1.2	20	
Molybdenum	0.0563	0.0010	0.05	0.005244	102	70	130	0.05467	2.9	20	
Nickel	0.0524	0.0050	0.05	0.0007079	103	70	130	0.05142	1.8	20	
Selenium	0.0556	0.0010	0.05	0.0001408	111	70	130	0.05284	5.1	20	
Silver	0.0179	0.0010	0.02		89	70	130	0.01758	1.8	20	
Uranium	0.0560	0.00030	0.05	0.004777	103	70	130	0.05594	0.2	20	
Vanadium	0.0527	0.010	0.05	0.001815	102	70	130	0.05195	1.5	20	
Zinc	0.0782	0.010	0.05	0.02659	103	70	130	0.07788	0.4	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICPMS204-B_140917A: 216** SampType: **Sample Matrix Spike** Lab ID: **H14090234-016BMS** Method: **E200.8**

Analysis Date: **09/18/14 07:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0482	0.030	0.05	0.001672	93	70	130				
Antimony	0.0493	0.0010	0.05	0.0002998	98	70	130				
Arsenic	0.0605	0.0010	0.05	0.007243	107	70	130				
Barium	0.0923	0.050	0.05	0.04178	101	70	130				
Beryllium	0.0512	0.0010	0.05		102	70	130				
Cadmium	0.0507	0.0010	0.05	0.0000558	101	70	130				
Chromium	0.0509	0.0050	0.05		102	70	130				
Cobalt	0.0482	0.0050	0.05	0.0004152	96	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 216** SampType: **Sample Matrix Spike** Lab ID: **H14090234-016BMS** Method: **E200.8**

Analysis Date: **09/18/14 07:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0605	0.0050	0.05	0.008959	103	70	130				
Iron	0.199	0.020	0.15	0.04808	101	70	130				
Lead	0.0503	0.0010	0.05	0.0004734	100	70	130				
Manganese	0.142	0.0010	0.05	0.0972	90	70	130				
Molybdenum	0.0540	0.0010	0.05	0.004064	100	70	130				
Nickel	0.0522	0.0050	0.05	0.0008159	103	70	130				
Selenium	0.0532	0.0010	0.05	0.000234	106	70	130				
Silver	0.0167	0.0010	0.02		83	70	130				
Uranium	0.0556	0.00030	0.05	0.003689	104	70	130				
Vanadium	0.0532	0.010	0.05	0.002058	102	70	130				
Zinc	0.0880	0.010	0.05	0.03641	103	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Run ID :Run Order: **ICPMS204-B_140917A: 217** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-016BMSD** Method: **E200.8**

Analysis Date: **09/18/14 07:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0477	0.030	0.05	0.001672	92	70	130	0.04816	1.0	20	
Antimony	0.0490	0.0010	0.05	0.0002998	97	70	130	0.04926	0.5	20	
Arsenic	0.0617	0.0010	0.05	0.007243	109	70	130	0.06053	1.9	20	
Barium	0.0919	0.050	0.05	0.04178	100	70	130	0.09233	0.5	20	
Beryllium	0.0502	0.0010	0.05		100	70	130	0.05125	2.1	20	
Cadmium	0.0509	0.0010	0.05	0.0000558	102	70	130	0.05074	0.4	20	
Chromium	0.0512	0.0050	0.05		102	70	130	0.05087	0.6	20	
Cobalt	0.0485	0.0050	0.05	0.0004152	96	70	130	0.04818	0.6	20	
Copper	0.0611	0.0050	0.05	0.008959	104	70	130	0.06054	0.9	20	
Iron	0.207	0.020	0.15	0.04808	106	70	130	0.1993	4.0	20	
Lead	0.0502	0.0010	0.05	0.0004734	100	70	130	0.05034	0.2	20	
Manganese	0.144	0.0010	0.05	0.0972	93	70	130	0.142	1.3	20	
Molybdenum	0.0534	0.0010	0.05	0.004064	99	70	130	0.05398	1.0	20	
Nickel	0.0521	0.0050	0.05	0.0008159	103	70	130	0.05224	0.2	20	
Selenium	0.0556	0.0010	0.05	0.000234	111	70	130	0.05323	4.4	20	
Silver	0.0173	0.0010	0.02		86	70	130	0.01666	3.7	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100637

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140917A: 217** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-016BMSD** Method: **E200.8**

Analysis Date: **09/18/14 07:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	0.0552	0.00030	0.05	0.003689	103	70	130	0.05563	0.7	20	
Vanadium	0.0532	0.010	0.05	0.002058	102	70	130	0.05316	0.1	20	
Zinc	0.0887	0.010	0.05	0.03641	104	70	130	0.08803	0.7	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B, H14090234-005B, H14090234-006B, H14090234-007B, H14090234-008B, H14090234-009B, H14090234-010B, H14090234-011B, H14090234-012B, H14090234-013B, H14090234-014B, H14090234-015B, H14090234-016B, H14090234-017B, H14090234-018B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100687

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140919A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**
Analysis Date: **09/18/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.00612	0.10				0	0				

Associated samples: **H14090234-001A**

Run ID :Run Order: **FIA203-HE_140919A: 29** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.515	0.10	0.5		103	90	110				

Associated samples: **H14090234-001A**

Run ID :Run Order: **FIA203-HE_140919A: 43** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **09/18/14 15:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.523	0.10	0.5		105	90	110				

Associated samples: **H14090234-001A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100707

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140918A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **09/18/14 13:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0298	0.0050	0.03		99	90	110				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C**

Run ID :Run Order: **ICPMS204-B_140918A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **09/18/14 13:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.000261	0.0050									

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C**

Run ID :Run Order: **ICPMS204-B_140918A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **09/18/14 13:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0175	0.0050	0.02		88	70	130				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C**

Run ID :Run Order: **ICPMS204-B_140918A: 17** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**
Analysis Date: **09/18/14 14:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	3E-05									

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B**

Run ID :Run Order: **ICPMS204-B_140918A: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**
Analysis Date: **09/18/14 14:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0201	0.0050	0.02		101	85	115				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B**

Run ID :Run Order: **ICPMS204-B_140918A: 36** SampType: **Sample Matrix Spike** Lab ID: **H14090234-001BMS** Method: **E200.8**
Analysis Date: **09/18/14 15:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0183	0.0010	0.02		91	70	130				

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100707

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140918A: 37** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14090234-001BMSD** Method: **E200.8**
Analysis Date: **09/18/14 15:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0188	0.0010	0.02		94	70	130	0.01829	2.7	20	

Associated samples: **H14090234-001B, H14090234-002B, H14090234-003B, H14090234-004B**

Run ID :Run Order: **ICPMS204-B_140918A: 81** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **09/18/14 21:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0301	0.0050	0.03		100	90	110				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C**

Run ID :Run Order: **ICPMS204-B_140918A: 82** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **09/18/14 21:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.000203	0.0050									

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C**

Run ID :Run Order: **ICPMS204-B_140918A: 83** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **09/18/14 21:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0177	0.0050	0.02		88	70	130				

Associated samples: **H14090234-001B, H14090234-001C, H14090234-002B, H14090234-002C, H14090234-003B, H14090234-003C, H14090234-004B, H14090234-004C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100780

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140922A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **09/22/14 11:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.0320	0.0010	0.03		107	90	110				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **09/22/14 11:32** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.000583	0.0010									

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Run ID :Run Order: **ICPMS204-B_140922A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **09/22/14 11:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.0103	0.0010	0.01		103	70	130				

Associated samples: **H14090234-001C, H14090234-002C, H14090234-003C, H14090234-004C, H14090234-006C, H14090234-007C, H14090234-008C, H14090234-009C, H14090234-010C, H14090234-012C, H14090234-014C, H14090234-015C, H14090234-016C, H14090234-017C, H14090234-018C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100829

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140924A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **09/24/14 10:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.527	0.10	0.5		105	90	110				

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **FIA203-HE_140924A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **09/24/14 10:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0437	0.10				0	0				

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **FIA203-HE_140924A: 29** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **09/24/14 10:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.551	0.10	0.5		110	90	110				

Associated samples: **H14090234-004A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A, H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100882

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_140925B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **09/25/14 13:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.540	0.10	0.5		**108**	90	110				

Associated samples: **H14090234-002A, H14090234-003A**

Run ID :Run Order: **FIA203-HE_140925B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **09/25/14 13:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0812	0.10				0	0				

Associated samples: **H14090234-002A, H14090234-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100994

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **09/30/14 08:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.07	0.10	4		102	90	110				
Barium	0.796	0.10	0.8		100	90	110				
Cobalt	0.782	0.010	0.8		98	90	110				
Copper	0.806	0.010	0.8		101	90	110				
Iron	4.05	0.020	4		101	90	110				
Manganese	3.99	0.010	4		100	90	110				
Nickel	0.781	0.010	0.8		98	90	110				
Vanadium	0.810	0.10	0.8		101	90	110				
Zinc	0.789	0.010	0.8		99	90	110				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028A, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B, H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICP2-HE_140930A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **09/30/14 08:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	537	0.10	500		107	80	120				
Barium	0.000360	0.10				0	0				
Cobalt	-0.00863	0.010				0	0				
Copper	0.00216	0.010				0	0				
Iron	194	0.020	200		97	80	120				
Manganese	-0.00708	0.010				0	0				
Nickel	0.00464	0.010				0	0				
Vanadium	0.000310	0.10				0	0				
Zinc	0.00411	0.010				0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100994

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **09/30/14 08:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-019A, H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A,** H14090234-027B, H14090234-028A, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B, H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-**040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A,** H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-**061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B**

Run ID :Run Order: **ICP2-HE_140930A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **09/30/14 08:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	533	0.10	500		107	80	120				
Barium	0.500	0.10	0.5		100	80	120				
Cobalt	0.474	0.010	0.5		95	80	120				
Copper	0.505	0.010	0.5		101	80	120				
Iron	192	0.020	200		96	80	120				
Manganese	0.483	0.010	0.5		97	80	120				
Nickel	0.956	0.010	1		96	80	120				
Vanadium	0.489	0.10	0.5		98	80	120				
Zinc	1.00	0.010	1		100	80	120				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-**023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028A, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B, H14090234-031A, H14090234-**031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B,** H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, **H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-**061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100994

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_140930A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**

Analysis Date: **09/30/14 09:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.006	0.002									
Barium	ND	0.0003									
Cobalt	0.001	0.001									
Copper	ND	0.006									
Iron	0.009	0.003									
Manganese	ND	0.0004									
Nickel	ND	0.0008									
Vanadium	ND	0.001									
Zinc	0.002	0.0008									

Associated samples: **H14090234-023B**

Run ID :Run Order: **ICP2-HE_140930A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**

Analysis Date: **09/30/14 09:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.02	0.10	5	0.00603	**100**	85	115				
Barium	0.961	0.10	1		**96**	85	115				
Cobalt	0.906	0.010	1	0.00137	**90**	85	115				
Copper	0.977	0.010	1		**98**	85	115				
Iron	5.01	0.020	5	0.0089	**100**	85	115				
Manganese	4.94	0.010	5		**99**	85	115				
Nickel	0.971	0.010	1		**97**	85	115				
Vanadium	0.991	0.10	1		**99**	85	115				
Zinc	0.962	0.010	1	0.0017	**96**	85	115				

Associated samples: **H14090234-023B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R100996

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_140930A: 12** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **09/30/14 12:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0606	0.0010	0.06		101	90	110				
Arsenic	0.0610	0.0010	0.06		102	90	110				
Beryllium	0.0311	0.0010	0.03		104	90	110				
Boron	0.0624	0.0010	0.06		104	90	110				
Cadmium	0.0318	0.0010	0.03		106	90	110				
Chromium	0.0611	0.0010	0.06		102	90	110				
Lead	0.0607	0.0010	0.06		101	90	110				
Molybdenum	0.0608	0.0010	0.06		101	90	110				
Selenium	0.0610	0.0010	0.06		102	90	110				
Silver	0.0296	0.0010	0.03		99	90	110				
Uranium	0.0604	0.00030	0.06		101	90	110				

Associated samples: **H14090234-019A, H14090234-019B, H14090234-020A, H14090234-020B, H14090234-021A, H14090234-021B, H14090234-022A, H14090234-022B, H14090234-023A, H14090234-023B, H14090234-024A, H14090234-024B, H14090234-025A, H14090234-025B, H14090234-026A, H14090234-026B, H14090234-027A, H14090234-027B, H14090234-028A, H14090234-028B, H14090234-029A, H14090234-029B, H14090234-030A, H14090234-030B, H14090234-031A, H14090234-031B, H14090234-032A, H14090234-032B, H14090234-033A, H14090234-033B, H14090234-034A, H14090234-034B, H14090234-035A, H14090234-035B, H14090234-036A, H14090234-036B, H14090234-037A, H14090234-037B, H14090234-038A, H14090234-038B, H14090234-039A, H14090234-039B, H14090234-040A, H14090234-040B, H14090234-041A, H14090234-041B, H14090234-042A, H14090234-042B, H14090234-043A, H14090234-043B, H14090234-044A, H14090234-044B, H14090234-045A, H14090234-045B, H14090234-046A, H14090234-046B, H14090234-047A, H14090234-047B, H14090234-048A, H14090234-048B, H14090234-050A, H14090234-050B, H14090234-051A, H14090234-051B, H14090234-052A, H14090234-052B, H14090234-053A, H14090234-053B, H14090234-054A, H14090234-054B, H14090234-055A, H14090234-055B, H14090234-056A, H14090234-056B, H14090234-057A, H14090234-057B, H14090234-058A, H14090234-058B, H14090234-059A, H14090234-059B, H14090234-060A, H14090234-060B, H14090234-061A, H14090234-061B, H14090234-062A, H14090234-062B, H14090234-063A, H14090234-063B, H14090234-064A, H14090234-064B, H14090234-065A, H14090234-065B, H14090234-066A, H14090234-066B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101058

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141002A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **10/02/14 08:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.03	0.10	4		101	90	110				
Barium	0.794	0.10	0.8		99	90	110				
Cobalt	0.774	0.010	0.8		97	90	110				
Copper	0.808	0.010	0.8		101	90	110				
Iron	4.05	0.020	4		101	90	110				
Manganese	3.95	0.010	4		99	90	110				
Nickel	0.796	0.010	0.8		100	90	110				
Vanadium	0.809	0.10	0.8		101	90	110				
Zinc	0.766	0.010	0.8		96	90	110				

Associated samples: **H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICP2-HE_141002A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **10/02/14 08:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	525	0.10	500		105	80	120				
Barium	0.000620	0.10				0	0				
Cobalt	-0.0197	0.010				0	0				
Copper	0.00606	0.010				0	0				
Iron	193	0.020	200		97	80	120				
Manganese	-0.000340	0.010				0	0				
Nickel	0.00570	0.010				0	0				
Vanadium	0.00498	0.10				0	0				
Zinc	0.00275	0.010				0	0				

Associated samples: **H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Run ID :Run Order: **ICP2-HE_141002A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **10/02/14 09:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	520	0.10	500		104	80	120				
Barium	0.502	0.10	0.5		100	80	120				
Cobalt	0.434	0.010	0.5		87	80	120				
Copper	0.526	0.010	0.5		105	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101058

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141002A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **10/02/14 09:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	192	0.020	200		96	80	120				
Manganese	0.487	0.010	0.5		97	80	120				
Nickel	0.960	0.010	1		96	80	120				
Vanadium	0.489	0.10	0.5		98	80	120				
Zinc	0.963	0.010	1		96	80	120				

Associated samples: **H14090234-054A, H14090234-054B, H14090234-057A, H14090234-057B, H14090234-060A, H14090234-060B, H14090234-063A, H14090234-063B, H14090234-066A, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101084

Date: *16-Oct-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 1** SampType: **Sample Duplicate** Lab ID: **H14090234-020BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	20.8	0.20						20.93			

Associated samples: **H14090234-019B, H14090234-020B, H14090234-021B, H14090234-022B, H14090234-023B, H14090234-024B, H14090234-025B, H14090234-026B, H14090234-027B, H14090234-028B, H14090234-029B, H14090234-030B, H14090234-031B, H14090234-032B, H14090234-033B, H14090234-034B, H14090234-035B, H14090234-036B, H14090234-037B, H14090234-038B, H14090234-039B, H14090234-040B, H14090234-041B, H14090234-042B, H14090234-043B, H14090234-044B, H14090234-045B, H14090234-046B, H14090234-047B, H14090234-048B, H14090234-050B, H14090234-051B, H14090234-052B, H14090234-053B, H14090234-054B, H14090234-055B, H14090234-056B, H14090234-057B, H14090234-058B, H14090234-059B, H14090234-060B, H14090234-061B, H14090234-062B, H14090234-063B, H14090234-064B, H14090234-065B, H14090234-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 2** SampType: **Sample Duplicate** Lab ID: **H14090234-029BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	55.6	0.20						57.17			

Associated samples: **H14090234-019B, H14090234-020B, H14090234-021B, H14090234-022B, H14090234-023B, H14090234-024B, H14090234-025B, H14090234-026B, H14090234-027B, H14090234-028B, H14090234-029B, H14090234-030B, H14090234-031B, H14090234-032B, H14090234-033B, H14090234-034B, H14090234-035B, H14090234-036B, H14090234-037B, H14090234-038B, H14090234-039B, H14090234-040B, H14090234-041B, H14090234-042B, H14090234-043B, H14090234-044B, H14090234-045B, H14090234-046B, H14090234-047B, H14090234-048B, H14090234-050B, H14090234-051B, H14090234-052B, H14090234-053B, H14090234-054B, H14090234-055B, H14090234-056B, H14090234-057B, H14090234-058B, H14090234-059B, H14090234-060B, H14090234-061B, H14090234-062B, H14090234-063B, H14090234-064B, H14090234-065B, H14090234-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 3** SampType: **Sample Duplicate** Lab ID: **H14090234-038BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	26.0	0.20						25.5			

Associated samples: **H14090234-019B, H14090234-020B, H14090234-021B, H14090234-022B, H14090234-023B, H14090234-024B, H14090234-025B, H14090234-026B, H14090234-027B, H14090234-028B, H14090234-029B, H14090234-030B, H14090234-031B, H14090234-032B, H14090234-033B, H14090234-034B, H14090234-035B, H14090234-036B, H14090234-037B, H14090234-038B, H14090234-039B, H14090234-040B, H14090234-041B, H14090234-042B, H14090234-043B, H14090234-044B, H14090234-045B, H14090234-046B, H14090234-047B, H14090234-048B, H14090234-050B, H14090234-051B, H14090234-052B, H14090234-053B, H14090234-054B, H14090234-055B, H14090234-056B, H14090234-057B, H14090234-058B, H14090234-059B, H14090234-060B, H14090234-061B, H14090234-062B, H14090234-063B, H14090234-064B, H14090234-065B, H14090234-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 4** SampType: **Sample Duplicate** Lab ID: **H14090234-047BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	27.3	0.20						27.18			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101084

Date: *16-Oct-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 4** SampType: **Sample Duplicate** Lab ID: **H14090234-047BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14090234-019B, H14090234-020B, H14090234-021B, H14090234-022B, H14090234-023B, H14090234-024B, H14090234-025B, H14090234-026B, H14090234-027B, H14090234-028B, H14090234-029B, H14090234-030B, H14090234-031B, H14090234-032B, H14090234-033B, H14090234-034B, H14090234-035B, H14090234-036B, H14090234-037B, H14090234-038B, H14090234-039B, H14090234-040B, H14090234-041B, H14090234-042B, H14090234-043B, H14090234-044B, H14090234-045B, H14090234-046B, H14090234-047B, H14090234-048B, H14090234-050B, H14090234-051B, H14090234-052B, H14090234-053B, H14090234-054B, H14090234-055B, H14090234-056B, H14090234-057B, H14090234-058B, H14090234-059B, H14090234-060B, H14090234-061B, H14090234-062B, H14090234-063B, H14090234-064B, H14090234-065B, H14090234-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 5** SampType: **Sample Duplicate** Lab ID: **H14090234-056BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	19.1	0.20						18.87			

Associated samples: **H14090234-019B, H14090234-020B, H14090234-021B, H14090234-022B, H14090234-023B, H14090234-024B, H14090234-025B, H14090234-026B, H14090234-027B, H14090234-028B, H14090234-029B, H14090234-030B, H14090234-031B, H14090234-032B, H14090234-033B, H14090234-034B, H14090234-035B, H14090234-036B, H14090234-037B, H14090234-038B, H14090234-039B, H14090234-040B, H14090234-041B, H14090234-042B, H14090234-043B, H14090234-044B, H14090234-045B, H14090234-046B, H14090234-047B, H14090234-048B, H14090234-050B, H14090234-051B, H14090234-052B, H14090234-053B, H14090234-054B, H14090234-055B, H14090234-056B, H14090234-057B, H14090234-058B, H14090234-059B, H14090234-060B, H14090234-061B, H14090234-062B, H14090234-063B, H14090234-064B, H14090234-065B, H14090234-066B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141002A: 6** SampType: **Sample Duplicate** Lab ID: **H14090234-065BDUP** Method: **D2974**

Analysis Date: **10/03/14 08:37** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	20.2	0.20						20.39			

Associated samples: **H14090234-019B, H14090234-020B, H14090234-021B, H14090234-022B, H14090234-023B, H14090234-024B, H14090234-025B, H14090234-026B, H14090234-027B, H14090234-028B, H14090234-029B, H14090234-030B, H14090234-031B, H14090234-032B, H14090234-033B, H14090234-034B, H14090234-035B, H14090234-036B, H14090234-037B, H14090234-038B, H14090234-039B, H14090234-040B, H14090234-041B, H14090234-042B, H14090234-043B, H14090234-044B, H14090234-045B, H14090234-046B, H14090234-047B, H14090234-048B, H14090234-050B, H14090234-051B, H14090234-052B, H14090234-053B, H14090234-054B, H14090234-055B, H14090234-056B, H14090234-057B, H14090234-058B, H14090234-059B, H14090234-060B, H14090234-061B, H14090234-062B, H14090234-063B, H14090234-064B, H14090234-065B, H14090234-066B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101219

Date: *16-Oct-14*

Run ID :Run Order: **SOIL DRYING OVEN 2_141007A: 2** SampType: **Sample Duplicate** Lab ID: **H14090234-049BDUP** Method: **D2974**

Analysis Date: **10/08/14 07:36** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	74.7	0.20						76.76			

Associated samples: **H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101277

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **10/09/14 09:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.97	0.10	4		99	90	110				
Barium	0.796	0.10	0.8		99	90	110				
Cobalt	0.778	0.010	0.8		97	90	110				
Copper	0.801	0.010	0.8		100	90	110				
Iron	3.99	0.020	4		100	90	110				
Manganese	3.97	0.010	4		99	90	110				
Nickel	0.782	0.010	0.8		98	90	110				
Vanadium	0.805	0.10	0.8		101	90	110				
Zinc	0.802	0.010	0.8		100	90	110				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **10/09/14 09:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	510	0.10	500		102	80	120				
Barium	0.000690	0.10				0	0				
Cobalt	-0.00842	0.010				0	0				
Copper	0.00292	0.010				0	0				
Iron	189	0.020	200		94	80	120				
Manganese	0.000380	0.010				0	0				
Nickel	0.00644	0.010				0	0				
Vanadium	0.00229	0.10				0	0				
Zinc	0.00306	0.010				0	0				

Associated samples: **H14090234-049A, H14090234-049B**

Run ID :Run Order: **ICP2-HE_141009B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **10/09/14 09:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	519	0.10	500		104	80	120				
Barium	0.510	0.10	0.5		102	80	120				
Cobalt	0.463	0.010	0.5		93	80	120				
Copper	0.521	0.010	0.5		104	80	120				
Iron	186	0.020	200		93	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101277

Date: *16-Oct-14*

Run ID :Run Order: **ICP2-HE_141009B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **10/09/14 09:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.484	0.010	0.5		97	80	120				
Nickel	0.938	0.010	1		94	80	120				
Vanadium	0.490	0.10	0.5		98	80	120				
Zinc	1.02	0.010	1		102	80	120				

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101293

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141009B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **10/09/14 11:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0598	0.0010	0.06		100	90	110				
Arsenic	0.0605	0.0010	0.06		101	90	110				
Beryllium	0.0308	0.0010	0.03		103	90	110				
Boron	0.0626	0.0010	0.06		104	90	110				
Cadmium	0.0321	0.0010	0.03		107	90	110				
Chromium	0.0617	0.0010	0.06		103	90	110				
Lead	0.0604	0.0010	0.06		101	90	110				
Molybdenum	0.0608	0.0010	0.06		101	90	110				
Selenium	0.0611	0.0010	0.06		102	90	110				
Uranium	0.0604	0.00030	0.06		101	90	110				

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101303

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141010A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **10/10/14 11:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0295	0.0010	0.03		98	90	110				

Associated samples: **H14090234-049A, H14090234-049B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101368

Date: *16-Oct-14*

Run ID :Run Order: **FIA203-HE_141014A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **10/14/14 09:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.533	0.10	0.5		**107**	90	110				

Associated samples: **H14090234-005A**

Run ID :Run Order: **FIA203-HE_141014A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **10/14/14 09:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	-0.0473	0.10				0	0				

Associated samples: **H14090234-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R101387

Date: *16-Oct-14*

Run ID :Run Order: **ICPMS204-B_141014A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **10/14/14 10:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0588	0.010	0.06		98	90	110				

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **10/14/14 10:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.000257	0.010									

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **10/14/14 11:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.000282	0.010				0	0				

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 121** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **10/14/14 19:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0587	0.010	0.06		98	90	110				

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 122** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **10/14/14 20:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.000256	0.010									

Associated samples: **H14090234-013C**

Run ID :Run Order: **ICPMS204-B_141014A: 123** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **10/14/14 20:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.000267	0.010				0	0				

Associated samples: **H14090234-013C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140912A

Date: *16-Oct-14*

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 4** SampType: **Method Blank** Lab ID: **MB-49_140912A** Method: **A2540 D**

Analysis Date: **09/12/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 5** SampType: **Laboratory Control Sample** Lab ID: **LCS-50_140912A** Method: **A2540 D**

Analysis Date: **09/12/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	88.0	10	100		88	80	120				

Associated samples: **H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Run ID :Run Order: **ACCU-124 (14410200)_140912A: 5** SampType: **Sample Duplicate** Lab ID: **H14090234-016A DUP** Method: **A2540 D**

Analysis Date: **09/12/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	17.8	2.2						17.78		5	

Associated samples: **H14090234-011A, H14090234-012A, H14090234-013A, H14090234-014A, H14090234-015A, H14090234-016A, H14090234-017A, H14090234-018A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14090234
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS140915A

Date: *16-Oct-14*

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 1** SampType: **Method Blank** Lab ID: **MB-1_140915A** Method: **A2540 D**
Analysis Date: **09/15/14 14:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A**

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_140915A** Method: **A2540 D**
Analysis Date: **09/15/14 14:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	101	10	100		**101**	80	120				

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A**

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 4** SampType: **Sample Duplicate** Lab ID: **H14090235-001A DUP** Method: **A2540 D**
Analysis Date: **09/15/14 14:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	113	33						110	**3.0**	5	

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A**

Run ID :Run Order: **ACCU-124 (14410200)_140915A: 1** SampType: **Sample Duplicate** Lab ID: **H14090241-001A DUP** Method: **A2540 D**
Analysis Date: **09/15/14 14:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	24.0	10						27	**12**	5	R

Associated samples: **H14090234-001A, H14090234-002A, H14090234-003A, H14090234-004A, H14090234-005A, H14090234-006A, H14090234-007A, H14090234-008A, H14090234-009A, H14090234-010A**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

MT DEQ-Federal Superfund

H14090234

Login completed by: Tracy L. Lorash
Date Received: 9/12/2014
Reviewed by: BL2000\rwilliams
Received by: tsp
Reviewed Date: 9/16/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☑	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample ID on COC is SS-14 Duplicate #1 -ID on bottles is Duplicate #1. Logged in with ID from COC.
Cooler 1 was received at 0.7°C, Coolers 2 and 3 at 0.2°C, Cooler 4 at 0.4°C, Box 1 at 16.1°C, Box 2 at 17.6°C.
Samples in coolers were received on wet ice with temperatures taken from a temperature blank. Samples in boxes were not received on ice and temperatures were taken from a client sample.
Both SS-15A metals samples were preserved with 2 mL nitric acid upon receipt to pH <2 in the laboratory. In accordance with the Clean Water Act, the non-filtererd sample must be held for 24 hours prior to analysis.
SS-15A nutrients sample was preserved to pH <2 with 2 mL of sulfuric acid per 250 mL in the laboratory upon receipt.
TI 9/12/14

ANALYTICAL SUMMARY REPORT

October 01, 2014

MT DEQ-Federal Superfund
PO Box 200901
Helena, MT 59620-0901

Work Order: H14090136 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 46 samples for MT DEQ-Federal Superfund on 9/8/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14090136-001	LYS-04	09/03/14 17:20	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-002	1GW-1056	09/03/14 15:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-003	1GW-1004A	09/04/14 14:30	09/08/14	Aqueous	Same As Above
H14090136-004	MW-2A DUP	09/03/14 14:30	09/08/14	Aqueous	Same As Above
H14090136-005	MW-2D	09/03/14 14:00	09/08/14	Aqueous	Same As Above
H14090136-006	LYS-05	09/03/14 15:25	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-007	LYS-06	09/03/14 19:50	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-008	MW-2A	09/03/14 14:20	09/08/14	Aqueous	Same As Above
H14090136-009	MW-2B	09/03/14 13:00	09/08/14	Aqueous	Same As Above
H14090136-010	LYP-07	09/03/14 17:20	09/08/14	Aqueous	Same As Above
H14090136-011	P-06A	09/03/14 18:30	09/08/14	Aqueous	Same As Above
H14090136-012	LYS-01	09/03/14 16:50	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA

ANALYTICAL SUMMARY REPORT

H14090136-013	Field Blank	09/04/14 13:25	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-014	MW-2C	09/03/14 17:30	09/08/14	Aqueous	Same As Above
H14090136-015	GW-1003	09/04/14 14:00	09/08/14	Aqueous	Same As Above
H14090136-016	LYS-03	09/03/14 19:40	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-017	LYS-07	09/03/14 16:50	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Hardness as CaCO3 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-018	GW-ST-BG	09/05/14 13:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-019	GW-1010R	09/03/14 19:30	09/08/14	Aqueous	Same As Above
H14090136-020	GW-1052R	09/03/14 18:15	09/08/14	Aqueous	Same As Above
H14090136-021	Field Blank	09/05/14 9:45	09/08/14	Aqueous	Same As Above
H14090136-022	GW-CR-BG	09/05/14 11:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-023	GW-CR-WS	09/05/14 11:30	09/08/14	Aqueous	Same As Above
H14090136-024	P-39R	09/04/14 16:15	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-025	P-37A	09/04/14 15:45	09/08/14	Aqueous	Same As Above

ANALYTICAL SUMMARY REPORT

H14090136-026	GW-ST-ES	09/05/14 13:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-027	GW-ST-WS	09/05/14 14:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-028	GW-MC-NS	09/04/14 19:00	09/08/14	Aqueous	Same As Above
H14090136-029	GW-RK-BG	09/04/14 12:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-030	P-39R DUP	09/04/14 16:15	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-031	MW-10	09/04/14 12:00	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-032	Field Blank	09/04/14 19:40	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-033	GW-MC-BG	09/04/14 17:30	09/08/14	Aqueous	Same As Above
H14090136-034	P-114	09/04/14 16:45	09/08/14	Aqueous	Same As Above
H14090136-035	MW-01	09/04/14 11:00	09/08/14	Aqueous	Same As Above
H14090136-036	P-58A	09/04/14 15:00	09/08/14	Aqueous	Same As Above

ANALYTICAL SUMMARY REPORT

H14090136-037	GW-MC-SS	09/04/14 17:30	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-038	GW-CR-ES	09/05/14 12:00	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-039	GW-FM-WS DUP	09/05/14 9:45	09/08/14	Aqueous	Same As Above
H14090136-040	GW-FM-WS	09/05/14 9:45	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-041	GW-FM-ES	09/05/14 9:15	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-042	GW-FM-BG	09/05/14 10:45	09/08/14	Aqueous	Same As Above
H14090136-043	GW-FR-ES	09/05/14 16:15	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Conductivity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Metals Digestion by EPA 200.2 Preparation, Dissolved Filtration Digestion, Mercury by CVAA
H14090136-044	GW-FR-WS	09/05/14 15:30	09/08/14	Aqueous	Same As Above
H14090136-045	GW-FR-BG	09/04/14 14:45	09/08/14	Aqueous	Same As Above
H14090136-046	LYS-02	09/03/14 17:00	09/08/14	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity Mercury, Dissolved Hardness as CaCO3 Anions by Ion Chromatography Preparation, Dissolved Filtration Digestion, Mercury by CVAA

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

ANALYTICAL SUMMARY REPORT

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-001
Client Sample ID: LYS-04

Report Date: 10/01/14
Collection Date: 09/03/14 17:20
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	4	mg/L		1		E300.0	09/09/14 17:14 / SRW
Sulfate	450	mg/L		1		E300.0	09/09/14 17:14 / SRW
Hardness as CaCO3	398	mg/L		1		A2340 B	09/17/14 16:31 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/17/14 14:09 / dck
Antimony	0.0015	mg/L		0.0005		E200.8	09/11/14 04:31 / dck
Arsenic	0.070	mg/L		0.001		E200.8	09/11/14 04:31 / dck
Barium	0.057	mg/L		0.003		E200.8	09/11/14 04:31 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:31 / dck
Boron	0.1	mg/L		0.1		E200.7	09/10/14 09:57 / sld
Cadmium	0.00004	mg/L		0.00003		E200.8	09/17/14 14:09 / dck
Calcium	103	mg/L		1		E200.7	09/10/14 09:57 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:31 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 04:31 / dck
Copper	0.008	mg/L		0.001		E200.8	09/11/14 04:31 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 04:31 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 04:31 / dck
Magnesium	34	mg/L		1		E200.7	09/10/14 09:57 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 04:31 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 14:33 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 04:31 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 04:31 / dck
Potassium	13	mg/L		1		E200.7	09/10/14 09:57 / sld
Selenium	0.003	mg/L		0.001		E200.8	09/11/14 04:31 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:31 / dck
Sodium	148	mg/L		1		E200.7	09/10/14 09:57 / sld
Uranium	0.0223	mg/L		0.0002		E200.8	09/11/14 04:31 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:31 / dck
Zinc	0.010	mg/L		0.008		E200.8	09/17/14 14:09 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-002
Client Sample ID: 1GW-1056

Report Date: 10/01/14
Collection Date: 09/03/14 15:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	09/09/14 13:01 / SRW
Bicarbonate as HCO3	140	mg/L		4		A2320 B	09/09/14 13:01 / SRW
Chloride	17	mg/L		1		E300.0	09/09/14 17:48 / SRW
Sulfate	180	mg/L		1		E300.0	09/09/14 17:48 / SRW
Hardness as CaCO3	244	mg/L		1		A2340 B	09/10/14 10:19 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 17:00 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 04:36 / dck
Arsenic	0.007	mg/L		0.001		E200.8	09/11/14 04:36 / dck
Barium	0.028	mg/L		0.003		E200.8	09/11/14 04:36 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:36 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 10:19 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 04:36 / dck
Calcium	73	mg/L		1		E200.7	09/10/14 10:19 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:36 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 04:36 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 04:36 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 04:36 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 04:36 / dck
Magnesium	15	mg/L		1		E200.7	09/10/14 10:19 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 04:36 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 14:38 / rgk
Molybdenum	0.007	mg/L		0.005		E200.8	09/11/14 04:36 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 04:36 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 10:19 / sld
Selenium	0.004	mg/L		0.001		E200.8	09/11/14 04:36 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:36 / dck
Sodium	26	mg/L		1		E200.7	09/10/14 10:19 / sld
Uranium	0.0346	mg/L		0.0002		E200.8	09/11/14 04:36 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:36 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 04:36 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-003
Client Sample ID: 1GW-1004A

Report Date: 10/01/14
Collection Date: 09/04/14 14:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	09/09/14 13:16 / SRW
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	09/09/14 13:16 / SRW
Chloride	54	mg/L		1		E300.0	09/09/14 17:59 / SRW
Sulfate	750	mg/L		1		E300.0	09/09/14 17:59 / SRW
Hardness as CaCO3	468	mg/L		1		A2340 B	09/15/14 16:23 / sld
METALS, DISSOLVED							
Aluminum	1.27	mg/L		0.009		E200.7	09/10/14 10:23 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 04:40 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/11/14 04:40 / dck
Barium	0.008	mg/L		0.003		E200.8	09/11/14 04:40 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:40 / dck
Boron	0.1	mg/L		0.1		E200.7	09/10/14 10:23 / sld
Cadmium	0.00773	mg/L		0.00003		E200.8	09/11/14 04:40 / dck
Calcium	95	mg/L		1		E200.7	09/10/14 10:23 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:40 / dck
Cobalt	0.04	mg/L		0.01		E200.8	09/11/14 04:40 / dck
Copper	0.127	mg/L		0.001		E200.8	09/11/14 04:40 / dck
Iron	46.9	mg/L		0.02		E200.7	09/10/14 10:23 / sld
Lead	0.0117	mg/L		0.0003		E200.8	09/11/14 04:40 / dck
Magnesium	56	mg/L		1		E200.7	09/10/14 10:23 / sld
Manganese	22.9	mg/L		0.001		E200.7	09/10/14 10:23 / sld
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 14:42 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 04:40 / dck
Nickel	0.023	mg/L		0.002		E200.8	09/11/14 04:40 / dck
Potassium	8	mg/L		1		E200.7	09/10/14 10:23 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 04:40 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:40 / dck
Sodium	53	mg/L		1		E200.7	09/10/14 10:23 / sld
Uranium	0.0006	mg/L		0.0002		E200.8	09/11/14 04:40 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:40 / dck
Zinc	9.97	mg/L		0.008		E200.7	09/10/14 10:23 / sld

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-004
Client Sample ID: MW-2A DUP

Report Date: 10/01/14
Collection Date: 09/03/14 14:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	130	mg/L		4		A2320 B	09/09/14 13:20 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	09/09/14 13:20 / SRW
Chloride	4	mg/L		1		E300.0	09/09/14 18:10 / SRW
Sulfate	220	mg/L		1		E300.0	09/09/14 18:10 / SRW
Hardness as CaCO3	271	mg/L		1		A2340 B	09/10/14 10:26 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 17:04 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 04:44 / dck
Arsenic	0.010	mg/L		0.001		E200.8	09/11/14 04:44 / dck
Barium	0.013	mg/L		0.003		E200.8	09/11/14 04:44 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:44 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 10:26 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 04:44 / dck
Calcium	87	mg/L		1		E200.7	09/10/14 10:26 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:44 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 04:44 / dck
Copper	0.001	mg/L		0.001		E200.8	09/16/14 17:04 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 17:04 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 04:44 / dck
Magnesium	13	mg/L		1		E200.7	09/10/14 10:26 / sld
Manganese	ND	mg/L		0.001		E200.8	09/19/14 16:00 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 14:46 / rgk
Molybdenum	0.008	mg/L		0.005		E200.8	09/11/14 04:44 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 04:44 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 10:26 / sld
Selenium	0.010	mg/L		0.001		E200.8	09/11/14 04:44 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:44 / dck
Sodium	26	mg/L		1		E200.7	09/10/14 10:26 / sld
Uranium	0.0393	mg/L		0.0002		E200.8	09/11/14 04:44 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:44 / dck
Zinc	ND	mg/L		0.008		E200.8	09/16/14 17:04 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-005
Client Sample ID: MW-2D

Report Date: 10/01/14
Collection Date: 09/03/14 14:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	150	mg/L		4		A2320 B	09/09/14 13:44 / SRW
Bicarbonate as HCO3	190	mg/L		4		A2320 B	09/09/14 13:44 / SRW
Chloride	24	mg/L		1		E300.0	09/09/14 18:21 / SRW
Sulfate	190	mg/L		1		E300.0	09/09/14 18:21 / SRW
Hardness as CaCO3	291	mg/L		1		A2340 B	09/10/14 10:30 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 10:30 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 04:49 / dck
Arsenic	0.006	mg/L		0.001		E200.8	09/11/14 04:49 / dck
Barium	0.040	mg/L		0.003		E200.8	09/11/14 04:49 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:49 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 10:30 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 04:49 / dck
Calcium	87	mg/L		1		E200.7	09/10/14 10:30 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:49 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 04:49 / dck
Copper	0.005	mg/L		0.001		E200.8	09/11/14 04:49 / dck
Iron	0.03	mg/L		0.02		E200.8	09/16/14 17:22 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 04:49 / dck
Magnesium	18	mg/L		1		E200.7	09/10/14 10:30 / sld
Manganese	0.002	mg/L		0.001		E200.8	09/11/14 04:49 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 14:50 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 04:49 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 04:49 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 10:30 / sld
Selenium	0.003	mg/L		0.001		E200.8	09/11/14 04:49 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:49 / dck
Sodium	26	mg/L		1		E200.7	09/10/14 10:30 / sld
Uranium	0.0502	mg/L		0.0002		E200.8	09/11/14 04:49 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:49 / dck
Zinc	0.012	mg/L		0.008		E200.8	09/11/14 04:49 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-006
Client Sample ID: LYS-05

Report Date: 10/01/14
Collection Date: 09/03/14 15:25
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	5	mg/L		1		E300.0	09/09/14 18:32 / SRW
Sulfate	4500	mg/L		1		E300.0	09/15/14 16:29 / SRW
Hardness as CaCO3	1660	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 10:34 / sld
Antimony	0.0013	mg/L		0.0005		E200.8	09/11/14 04:53 / dck
Arsenic	0.018	mg/L		0.001		E200.8	09/11/14 04:53 / dck
Barium	0.014	mg/L		0.003		E200.8	09/11/14 04:53 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:53 / dck
Boron	2.1	mg/L		0.1		E200.7	09/10/14 10:34 / sld
Cadmium	0.00017	mg/L		0.00003		E200.8	09/16/14 17:28 / dck
Calcium	447	mg/L		1		E200.7	09/10/14 10:34 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:53 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 04:53 / dck
Copper	0.011	mg/L		0.001		E200.8	09/11/14 04:53 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 04:53 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 04:53 / dck
Magnesium	132	mg/L		1		E200.7	09/10/14 10:34 / sld
Manganese	0.002	mg/L		0.001		E200.8	09/11/14 04:53 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 14:54 / rgk
Molybdenum	0.026	mg/L		0.005		E200.8	09/11/14 04:53 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 04:53 / dck
Potassium	21	mg/L		1		E200.7	09/10/14 10:34 / sld
Selenium	0.009	mg/L		0.001		E200.8	09/11/14 04:53 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:53 / dck
Sodium	1070	mg/L		1		E200.7	09/10/14 10:34 / sld
Uranium	1.67	mg/L		0.0002		E200.8	09/11/14 04:53 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:53 / dck
Zinc	0.012	mg/L		0.008		E200.8	09/11/14 04:53 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-007
Client Sample ID: LYS-06

Report Date: 10/01/14
Collection Date: 09/03/14 19:50
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	73	mg/L		4		A2320 B	09/09/14 13:52 / SRW
Bicarbonate as HCO3	88	mg/L		4		A2320 B	09/09/14 13:52 / SRW
Chloride	61	mg/L		1		E300.0	09/09/14 18:43 / SRW
Sulfate	1300	mg/L		1		E300.0	09/09/14 18:43 / SRW
Hardness as CaCO3	850	mg/L		1		A2340 B	09/10/14 10:38 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 17:51 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 04:58 / dck
Arsenic	0.003	mg/L		0.001		E200.8	09/11/14 04:58 / dck
Barium	0.010	mg/L		0.003		E200.8	09/11/14 04:58 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 04:58 / dck
Boron	0.3	mg/L		0.1		E200.7	09/10/14 10:38 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 04:58 / dck
Calcium	258	mg/L		1		E200.7	09/10/14 10:38 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 04:58 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 04:58 / dck
Copper	0.012	mg/L		0.001		E200.8	09/11/14 04:58 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 04:58 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 04:58 / dck
Magnesium	50	mg/L		1		E200.7	09/10/14 10:38 / sld
Manganese	0.007	mg/L		0.001		E200.8	09/11/14 04:58 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:07 / rgk
Molybdenum	0.011	mg/L		0.005		E200.8	09/11/14 04:58 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 04:58 / dck
Potassium	ND	mg/L		1		E200.7	09/10/14 10:38 / sld
Selenium	0.004	mg/L		0.001		E200.8	09/11/14 04:58 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 04:58 / dck
Sodium	229	mg/L		1		E200.7	09/10/14 10:38 / sld
Uranium	0.0066	mg/L		0.0002		E200.8	09/11/14 04:58 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 04:58 / dck
Zinc	0.023	mg/L		0.008		E200.8	09/11/14 04:58 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-008
Client Sample ID: MW-2A

Report Date: 10/01/14
Collection Date: 09/03/14 14:20
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	09/09/14 13:57 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	09/09/14 13:57 / SRW
Chloride	4	mg/L		1		E300.0	09/09/14 18:54 / SRW
Sulfate	220	mg/L		1		E300.0	09/09/14 18:54 / SRW
Hardness as CaCO3	270	mg/L		1		A2340 B	09/10/14 10:42 / abb
METALS, DISSOLVED							
Aluminum	0.010	mg/L		0.009		E200.8	09/16/14 17:55 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 05:02 / dck
Arsenic	0.010	mg/L		0.001		E200.8	09/11/14 05:02 / dck
Barium	0.013	mg/L		0.003		E200.8	09/11/14 05:02 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:02 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 10:42 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 05:02 / dck
Calcium	86	mg/L		1		E200.7	09/10/14 10:42 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:02 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:02 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 05:02 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 05:02 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 05:02 / dck
Magnesium	13	mg/L		1		E200.7	09/10/14 10:42 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 05:02 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:11 / rgk
Molybdenum	0.008	mg/L		0.005		E200.8	09/11/14 05:02 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 05:02 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 10:42 / sld
Selenium	0.010	mg/L		0.001		E200.8	09/11/14 05:02 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:02 / dck
Sodium	26	mg/L		1		E200.7	09/10/14 10:42 / sld
Uranium	0.0388	mg/L		0.0002		E200.8	09/11/14 05:02 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:02 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 05:02 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-009
Client Sample ID: MW-2B

Report Date: 10/01/14
Collection Date: 09/03/14 13:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	94	mg/L		4		A2320 B	09/09/14 14:05 / SRW
Bicarbonate as HCO3	110	mg/L		4		A2320 B	09/09/14 14:05 / SRW
Chloride	21	mg/L		1		E300.0	09/09/14 19:05 / SRW
Sulfate	120	mg/L		1		E300.0	09/09/14 19:05 / SRW
Hardness as CaCO3	199	mg/L		1		A2340 B	09/10/14 10:46 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/17/14 14:13 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 05:07 / dck
Arsenic	0.010	mg/L		0.001		E200.8	09/11/14 05:07 / dck
Barium	0.027	mg/L		0.003		E200.8	09/11/14 05:07 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:07 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 10:46 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 05:07 / dck
Calcium	56	mg/L		1		E200.7	09/10/14 10:46 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:07 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:07 / dck
Copper	0.002	mg/L		0.001		E200.8	09/11/14 05:07 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 05:07 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 05:07 / dck
Magnesium	14	mg/L		1		E200.7	09/10/14 10:46 / sld
Manganese	0.004	mg/L		0.001		E200.8	09/11/14 05:07 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:15 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 05:07 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 05:07 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 10:46 / sld
Selenium	0.002	mg/L		0.001		E200.8	09/11/14 05:07 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:07 / dck
Sodium	23	mg/L		1		E200.7	09/10/14 10:46 / sld
Uranium	0.0049	mg/L		0.0002		E200.8	09/11/14 05:07 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:07 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 05:07 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-010
Client Sample ID: LYP-07

Report Date: 10/01/14
Collection Date: 09/03/14 17:20
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	180	mg/L		4		A2320 B	09/09/14 14:12 / SRW
Bicarbonate as HCO3	220	mg/L		4		A2320 B	09/09/14 14:12 / SRW
Chloride	23	mg/L		1		E300.0	09/09/14 19:17 / SRW
Sulfate	150	mg/L		1		E300.0	09/09/14 19:17 / SRW
Hardness as CaCO3	269	mg/L		1		A2340 B	09/10/14 11:08 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/17/14 14:17 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/17/14 14:17 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/11/14 05:24 / dck
Barium	0.055	mg/L		0.003		E200.8	09/11/14 05:24 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:24 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 11:08 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 05:24 / dck
Calcium	82	mg/L		1		E200.7	09/10/14 11:08 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:24 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:24 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 05:24 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 05:24 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 05:24 / dck
Magnesium	15	mg/L		1		E200.7	09/10/14 11:08 / sld
Manganese	0.060	mg/L		0.001		E200.8	09/11/14 05:24 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:20 / rgk
Molybdenum	0.010	mg/L		0.005		E200.8	09/11/14 05:24 / dck
Nickel	0.004	mg/L		0.002		E200.8	09/11/14 05:24 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 11:08 / sld
Selenium	0.002	mg/L		0.001		E200.8	09/11/14 05:24 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:24 / dck
Sodium	32	mg/L		1		E200.7	09/10/14 11:08 / sld
Uranium	0.0579	mg/L		0.0002		E200.8	09/11/14 05:24 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:24 / dck
Zinc	0.020	mg/L		0.008		E200.8	09/11/14 05:24 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-011
Client Sample ID: P-06A

Report Date: 10/01/14
Collection Date: 09/03/14 18:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	130	mg/L		4		A2320 B	09/09/14 14:20 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	09/09/14 14:20 / SRW
Chloride	73	mg/L		1		E300.0	09/09/14 19:50 / SRW
Sulfate	180	mg/L		1		E300.0	09/09/14 19:50 / SRW
Hardness as CaCO3	217	mg/L		1		A2340 B	09/10/14 11:12 / abb
METALS, DISSOLVED							
Aluminum	0.080	mg/L		0.009		E200.7	09/10/14 11:12 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 05:42 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 05:42 / dck
Barium	0.030	mg/L		0.003		E200.8	09/11/14 05:42 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:42 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 11:12 / sld
Cadmium	0.00104	mg/L		0.00003		E200.8	09/11/14 05:42 / dck
Calcium	65	mg/L		1		E200.7	09/10/14 11:12 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:42 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:42 / dck
Copper	0.061	mg/L		0.001		E200.8	09/11/14 05:42 / dck
Iron	0.22	mg/L		0.02		E200.8	09/24/14 22:33 / dck
Lead	0.0019	mg/L		0.0003		E200.8	09/11/14 05:42 / dck
Magnesium	13	mg/L		1		E200.7	09/10/14 11:12 / sld
Manganese	0.197	mg/L		0.001		E200.8	09/11/14 05:42 / dck
Mercury	0.000062	mg/L		5E-06		E245.1	09/24/14 11:41 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 05:42 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 05:42 / dck
Potassium	5	mg/L		1		E200.7	09/10/14 11:12 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 05:42 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:42 / dck
Sodium	78	mg/L		1		E200.7	09/10/14 11:12 / sld
Uranium	0.0060	mg/L		0.0002		E200.8	09/11/14 05:42 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:42 / dck
Zinc	0.226	mg/L		0.008		E200.8	09/11/14 05:42 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-012
Client Sample ID: LYS-01

Report Date: 10/01/14
Collection Date: 09/03/14 16:50
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	27	mg/L		1		E300.0	09/09/14 20:23 / SRW
Sulfate	230	mg/L		1		E300.0	09/09/14 20:23 / SRW
Hardness as CaCO3	341	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 18:04 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 05:46 / dck
Arsenic	0.003	mg/L		0.001		E200.8	09/11/14 05:46 / dck
Barium	0.039	mg/L		0.003		E200.8	09/11/14 05:46 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:46 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 11:15 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 05:46 / dck
Calcium	101	mg/L		1		E200.7	09/10/14 11:15 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:46 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:46 / dck
Copper	0.001	mg/L		0.001		E200.8	09/11/14 05:46 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 05:46 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 05:46 / dck
Magnesium	21	mg/L		1		E200.7	09/10/14 11:15 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 05:46 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:28 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 05:46 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 05:46 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 11:15 / sld
Selenium	0.005	mg/L		0.001		E200.8	09/11/14 05:46 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:46 / dck
Sodium	38	mg/L		1		E200.7	09/10/14 11:15 / sld
Uranium	0.109	mg/L		0.0002		E200.8	09/11/14 05:46 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:46 / dck
Zinc	0.011	mg/L		0.008		E200.8	09/16/14 18:04 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-013
Client Sample ID: Field Blank

Report Date: 10/01/14
Collection Date: 09/04/14 13:25
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	09/09/14 14:27 / SRW
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	09/09/14 14:27 / SRW
Chloride	ND	mg/L		1		E300.0	09/09/14 20:34 / SRW
Sulfate	ND	mg/L		1		E300.0	09/09/14 20:34 / SRW
Hardness as CaCO3	ND	mg/L		1		A2340 B	09/10/14 11:19 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 18:08 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 05:51 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/11/14 05:51 / dck
Barium	ND	mg/L		0.003		E200.8	09/11/14 05:51 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:51 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 11:19 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 05:51 / dck
Calcium	ND	mg/L		1		E200.7	09/10/14 11:19 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:51 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:51 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 05:51 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 05:51 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 05:51 / dck
Magnesium	ND	mg/L		1		E200.7	09/10/14 11:19 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 05:51 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:32 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 05:51 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 05:51 / dck
Potassium	ND	mg/L		1		E200.7	09/10/14 11:19 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 05:51 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:51 / dck
Sodium	ND	mg/L		1		E200.7	09/10/14 11:19 / sld
Uranium	ND	mg/L		0.0002		E200.8	09/11/14 05:51 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:51 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 05:51 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-014
Client Sample ID: MW-2C

Report Date: 10/01/14
Collection Date: 09/03/14 17:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	09/09/14 14:33 / SRW
Bicarbonate as HCO3	130	mg/L		4		A2320 B	09/09/14 14:33 / SRW
Chloride	20	mg/L		1		E300.0	09/09/14 20:45 / SRW
Sulfate	170	mg/L		1		E300.0	09/09/14 20:45 / SRW
Hardness as CaCO3	229	mg/L		1		A2340 B	09/10/14 11:23 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 11:23 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 05:55 / dck
Arsenic	0.006	mg/L		0.001		E200.8	09/11/14 05:55 / dck
Barium	0.017	mg/L		0.003		E200.8	09/11/14 05:55 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 05:55 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 11:23 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 05:55 / dck
Calcium	67	mg/L		1		E200.7	09/10/14 11:23 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 05:55 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 05:55 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 05:55 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 05:55 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 05:55 / dck
Magnesium	15	mg/L		1		E200.7	09/10/14 11:23 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 05:55 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:37 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 05:55 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 05:55 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 11:23 / sld
Selenium	0.002	mg/L		0.001		E200.8	09/11/14 05:55 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 05:55 / dck
Sodium	31	mg/L		1		E200.7	09/10/14 11:23 / sld
Uranium	0.0084	mg/L		0.0002		E200.8	09/11/14 05:55 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 05:55 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 05:55 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-015
Client Sample ID: GW-1003

Report Date: 10/01/14
Collection Date: 09/04/14 14:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	09/09/14 14:40 / SRW
Bicarbonate as HCO3	150	mg/L		4		A2320 B	09/09/14 14:40 / SRW
Chloride	13	mg/L		1		E300.0	09/09/14 20:57 / SRW
Sulfate	43	mg/L		1		E300.0	09/09/14 20:57 / SRW
Hardness as CaCO3	109	mg/L		1		A2340 B	09/10/14 11:27 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 18:39 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:00 / dck
Arsenic	0.010	mg/L		0.001		E200.8	09/11/14 06:00 / dck
Barium	0.038	mg/L		0.003		E200.8	09/11/14 06:00 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:00 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 11:27 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 06:00 / dck
Calcium	33	mg/L		1		E200.7	09/10/14 11:27 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:00 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:00 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 06:00 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 06:00 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:00 / dck
Magnesium	7	mg/L		1		E200.7	09/10/14 11:27 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 06:00 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/17/14 15:41 / rgk
Molybdenum	0.011	mg/L		0.005		E200.8	09/11/14 06:00 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:00 / dck
Potassium	5	mg/L		1		E200.7	09/10/14 11:27 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 06:00 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:00 / dck
Sodium	31	mg/L		1		E200.7	09/10/14 11:27 / sld
Uranium	0.0026	mg/L		0.0002		E200.8	09/11/14 06:00 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:00 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 06:00 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-016
Client Sample ID: LYS-03

Report Date: 10/01/14
Collection Date: 09/03/14 19:40
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	4	mg/L		1		E300.0	09/09/14 21:08 / SRW
Sulfate	100	mg/L		1		E300.0	09/09/14 21:08 / SRW
Hardness as CaCO3	139	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 18:43 / dck
Antimony	0.0007	mg/L		0.0005		E200.8	09/11/14 06:04 / dck
Arsenic	0.083	mg/L		0.001		E200.8	09/11/14 06:04 / dck
Barium	0.037	mg/L		0.003		E200.8	09/11/14 06:04 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:04 / dck
Boron	0.2	mg/L		0.1		E200.7	09/10/14 11:30 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 06:04 / dck
Calcium	42	mg/L		1		E200.7	09/10/14 11:30 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:04 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:04 / dck
Copper	0.002	mg/L		0.001		E200.8	09/11/14 06:04 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 06:04 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:04 / dck
Magnesium	8	mg/L		1		E200.7	09/10/14 11:30 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 06:04 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/24/14 11:45 / rgk
Molybdenum	0.022	mg/L		0.005		E200.8	09/11/14 06:04 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:04 / dck
Potassium	3	mg/L		1		E200.7	09/10/14 11:30 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 06:04 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:04 / dck
Sodium	47	mg/L		1		E200.7	09/10/14 11:30 / sld
Uranium	0.0017	mg/L		0.0002		E200.8	09/11/14 06:04 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:04 / dck
Zinc	0.010	mg/L		0.008		E200.8	09/11/14 06:04 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-017
Client Sample ID: LYS-07

Report Date: 10/01/14
Collection Date: 09/03/14 16:50
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Hardness as CaCO3	1120	mg/L		1		A2340 B	09/17/14 16:31 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 11:34 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:09 / dck
Arsenic	0.006	mg/L		0.001		E200.8	09/11/14 06:09 / dck
Barium	0.006	mg/L		0.003		E200.8	09/11/14 06:09 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:09 / dck
Boron	0.2	mg/L		0.1		E200.7	09/10/14 11:34 / sld
Cadmium	0.00004	mg/L		0.00003		E200.8	09/11/14 06:09 / dck
Calcium	316	mg/L		1		E200.7	09/10/14 11:34 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:09 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:09 / dck
Copper	0.004	mg/L		0.001		E200.8	09/11/14 06:09 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 06:09 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:09 / dck
Magnesium	80	mg/L		1		E200.7	09/10/14 11:34 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 06:09 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 16:37 / rgk
Molybdenum	0.110	mg/L		0.005		E200.8	09/11/14 06:09 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:09 / dck
Potassium	10	mg/L		1		E200.7	09/10/14 11:34 / sld
Selenium	0.003	mg/L		0.001		E200.8	09/11/14 06:09 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:09 / dck
Sodium	832	mg/L		1		E200.7	09/10/14 11:34 / sld
Uranium	0.199	mg/L		0.0002		E200.8	09/11/14 06:09 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:09 / dck
Zinc	0.009	mg/L		0.008		E200.8	09/11/14 06:09 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-018
Client Sample ID: GW-ST-BG

Report Date: 10/01/14
Collection Date: 09/05/14 13:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	19	mg/L		4		A2320 B	09/09/14 14:48 / SRW
Bicarbonate as HCO3	23	mg/L		4		A2320 B	09/09/14 14:48 / SRW
Chloride	48	mg/L		1		E300.0	09/09/14 21:19 / SRW
Sulfate	220	mg/L		1		E300.0	09/09/14 21:19 / SRW
Hardness as CaCO3	236	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	0.307	mg/L		0.009		E200.8	09/19/14 16:13 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:26 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 06:26 / dck
Barium	0.024	mg/L		0.003		E200.8	09/11/14 06:26 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:26 / dck
Boron	ND	mg/L		0.1		E200.8	09/11/14 06:26 / dck
Cadmium	0.00133	mg/L		0.00003		E200.8	09/11/14 06:26 / dck
Calcium	68	mg/L		1		E200.8	09/11/14 06:26 / dck
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:26 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:26 / dck
Copper	0.003	mg/L		0.001		E200.8	09/11/14 06:26 / dck
Iron	0.16	mg/L		0.02		E200.8	09/11/14 06:26 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:26 / dck
Magnesium	16	mg/L		1		E200.8	09/11/14 06:26 / dck
Manganese	1.01	mg/L		0.001		E200.8	09/11/14 06:26 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 16:42 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 06:26 / dck
Nickel	0.025	mg/L		0.002		E200.8	09/11/14 06:26 / dck
Potassium	4	mg/L		1		E200.8	09/11/14 06:26 / dck
Selenium	ND	mg/L		0.001		E200.8	09/11/14 06:26 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:26 / dck
Sodium	21	mg/L		1		E200.8	09/11/14 06:26 / dck
Uranium	ND	mg/L		0.0002		E200.8	09/11/14 06:26 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:26 / dck
Zinc	0.808	mg/L		0.008		E200.8	09/11/14 06:26 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-019
Client Sample ID: GW-1010R

Report Date: 10/01/14
Collection Date: 09/03/14 19:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	290	mg/L		4		A2320 B	09/09/14 14:54 / SRW
Bicarbonate as HCO3	350	mg/L		4		A2320 B	09/09/14 14:54 / SRW
Chloride	24	mg/L		1		E300.0	09/09/14 21:30 / SRW
Sulfate	430	mg/L		1		E300.0	09/09/14 21:30 / SRW
Hardness as CaCO3	386	mg/L		1		A2340 B	09/10/14 11:46 / abb
METALS, DISSOLVED							
Aluminum	0.079	mg/L		0.009		E200.7	09/10/14 11:46 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:31 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 06:31 / dck
Barium	0.024	mg/L		0.003		E200.8	09/11/14 06:31 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:31 / dck
Boron	0.1	mg/L		0.1		E200.7	09/10/14 11:46 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 06:31 / dck
Calcium	118	mg/L		1		E200.7	09/10/14 11:46 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:31 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:31 / dck
Copper	0.001	mg/L		0.001		E200.8	09/11/14 06:31 / dck
Iron	0.08	mg/L		0.02		E200.7	09/10/14 11:46 / sld
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:31 / dck
Magnesium	22	mg/L		1		E200.7	09/10/14 11:46 / sld
Manganese	0.006	mg/L		0.001		E200.8	09/11/14 06:31 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 16:46 / rgk
Molybdenum	0.009	mg/L		0.005		E200.8	09/11/14 06:31 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:31 / dck
Potassium	6	mg/L		1		E200.7	09/10/14 11:46 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 06:31 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:31 / dck
Sodium	144	mg/L		1		E200.7	09/10/14 11:46 / sld
Uranium	0.0948	mg/L		0.0002		E200.8	09/11/14 06:31 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:31 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 06:31 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-020
Client Sample ID: GW-1052R

Report Date: 10/01/14
Collection Date: 09/03/14 18:15
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	130	mg/L		4		A2320 B	09/09/14 15:02 / SRW
Bicarbonate as HCO3	160	mg/L		4		A2320 B	09/09/14 15:02 / SRW
Chloride	18	mg/L		1		E300.0	09/09/14 21:41 / SRW
Sulfate	330	mg/L		1		E300.0	09/09/14 21:41 / SRW
Hardness as CaCO3	265	mg/L		1		A2340 B	09/10/14 12:00 / abb
METALS, DISSOLVED							
Aluminum	0.070	mg/L		0.009		E200.7	09/10/14 12:00 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:35 / dck
Arsenic	0.004	mg/L		0.001		E200.8	09/11/14 06:35 / dck
Barium	0.033	mg/L		0.003		E200.8	09/11/14 06:35 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:35 / dck
Boron	0.1	mg/L		0.1		E200.7	09/10/14 12:00 / sld
Cadmium	0.00282	mg/L		0.00003		E200.8	09/11/14 06:35 / dck
Calcium	83	mg/L		1		E200.7	09/10/14 12:00 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:35 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:35 / dck
Copper	0.220	mg/L		0.001		E200.8	09/11/14 06:35 / dck
Iron	0.13	mg/L		0.02		E200.8	09/11/14 06:35 / dck
Lead	0.0013	mg/L		0.0003		E200.8	09/11/14 06:35 / dck
Magnesium	14	mg/L		1		E200.7	09/10/14 12:00 / sld
Manganese	3.41	mg/L		0.001		E200.7	09/10/14 12:00 / sld
Mercury	7.2E-06	mg/L		5E-06		E245.1	09/24/14 11:50 / rgk
Molybdenum	0.022	mg/L		0.005		E200.8	09/11/14 06:35 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:35 / dck
Potassium	8	mg/L		1		E200.7	09/10/14 12:00 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 06:35 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:35 / dck
Sodium	98	mg/L		1		E200.7	09/10/14 12:00 / sld
Uranium	0.0029	mg/L		0.0002		E200.8	09/11/14 06:35 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:35 / dck
Zinc	1.83	mg/L		0.008		E200.7	09/10/14 12:00 / sld

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-021
Client Sample ID: Field Blank

Report Date: 10/01/14
Collection Date: 09/05/14 09:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	09/09/14 15:10 / SRW
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	09/09/14 15:10 / SRW
Chloride	ND	mg/L		1		E300.0	09/09/14 21:52 / SRW
Sulfate	ND	mg/L		1		E300.0	09/09/14 21:52 / SRW
Hardness as CaCO3	ND	mg/L		1		A2340 B	09/10/14 12:04 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 18:57 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:53 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/11/14 06:53 / dck
Barium	ND	mg/L		0.003		E200.8	09/11/14 06:53 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:53 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:04 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 06:53 / dck
Calcium	ND	mg/L		1		E200.7	09/10/14 12:04 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:53 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:53 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 06:53 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 06:53 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:53 / dck
Magnesium	ND	mg/L		1		E200.7	09/10/14 12:04 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 06:53 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 16:54 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 06:53 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:53 / dck
Potassium	ND	mg/L		1		E200.7	09/10/14 12:04 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 06:53 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:53 / dck
Sodium	ND	mg/L		1		E200.7	09/10/14 12:04 / sld
Uranium	ND	mg/L		0.0002		E200.8	09/11/14 06:53 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:53 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 06:53 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-022
Client Sample ID: GW-CR-BG

Report Date: 10/01/14
Collection Date: 09/05/14 11:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	95	mg/L		4		A2320 B	09/09/14 15:16 / SRW
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/09/14 15:16 / SRW
Chloride	18	mg/L		1		E300.0	09/18/14 16:57 / SRW
Sulfate	110	mg/L		1		E300.0	09/18/14 16:57 / SRW
Hardness as CaCO3	66	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	10.6	mg/L		0.009		E200.8	09/16/14 19:10 / dck
Antimony	0.0021	mg/L		0.0005		E200.8	09/16/14 19:10 / dck
Arsenic	0.062	mg/L		0.001		E200.8	09/16/14 19:10 / dck
Barium	0.466	mg/L		0.003		E200.8	09/16/14 19:10 / dck
Beryllium	0.0019	mg/L		0.0008		E200.8	09/16/14 19:10 / dck
Boron	0.4	mg/L		0.1		E200.8	09/16/14 19:10 / dck
Cadmium	0.00044	mg/L		0.00003		E200.8	09/16/14 19:10 / dck
Calcium	20	mg/L		1		E200.8	09/16/14 19:10 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 19:10 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 19:10 / dck
Copper	0.036	mg/L		0.001		E200.8	09/16/14 19:10 / dck
Iron	5.60	mg/L		0.02		E200.8	09/16/14 19:10 / dck
Lead	0.0196	mg/L		0.0003		E200.8	09/16/14 19:10 / dck
Magnesium	4	mg/L		1		E200.8	09/16/14 19:10 / dck
Manganese	0.279	mg/L		0.001		E200.8	09/16/14 19:10 / dck
Mercury	0.000028	mg/L		5E-06		E245.1	09/24/14 11:54 / rgk
Molybdenum	0.009	mg/L		0.005		E200.8	09/16/14 19:10 / dck
Nickel	0.007	mg/L		0.002		E200.8	09/16/14 19:10 / dck
Potassium	7	mg/L		1		E200.8	09/16/14 19:10 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 19:10 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 19:10 / dck
Sodium	103	mg/L		1		E200.8	09/16/14 19:10 / dck
Uranium	0.0038	mg/L		0.0002		E200.8	09/16/14 19:10 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 19:10 / dck
Zinc	0.357	mg/L		0.008		E200.8	09/16/14 19:10 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-023
Client Sample ID: GW-CR-WS

Report Date: 10/01/14
Collection Date: 09/05/14 11:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	09/09/14 15:23 / SRW
Bicarbonate as HCO3	140	mg/L		4		A2320 B	09/09/14 15:23 / SRW
Chloride	29	mg/L		1		E300.0	09/09/14 22:59 / SRW
Sulfate	64	mg/L		1		E300.0	09/09/14 22:59 / SRW
Hardness as CaCO3	130	mg/L		1		A2340 B	09/19/14 08:41 / sld
METALS, DISSOLVED							
Aluminum	0.218	mg/L		0.009		E200.8	09/17/14 14:57 / dck
Antimony	0.0015	mg/L		0.0005		E200.8	09/17/14 14:57 / dck
Arsenic	0.006	mg/L		0.001		E200.8	09/17/14 14:57 / dck
Barium	0.270	mg/L		0.003		E200.8	09/17/14 14:57 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/17/14 14:57 / dck
Boron	0.2	mg/L		0.1		E200.8	09/17/14 14:57 / dck
Cadmium	0.0686	mg/L		0.00003		E200.8	09/17/14 14:57 / dck
Calcium	41	mg/L		1		E200.8	09/17/14 14:57 / dck
Chromium	ND	mg/L		0.01		E200.8	09/17/14 14:57 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/17/14 14:57 / dck
Copper	0.030	mg/L		0.001		E200.8	09/17/14 14:57 / dck
Iron	0.15	mg/L		0.02		E200.8	09/17/14 14:57 / dck
Lead	0.0030	mg/L		0.0003		E200.8	09/17/14 14:57 / dck
Magnesium	7	mg/L		1		E200.8	09/17/14 14:57 / dck
Manganese	2.07	mg/L		0.001		E200.8	09/17/14 14:57 / dck
Mercury	0.00038	mg/L		5E-06		E245.1	09/24/14 11:58 / rgk
Molybdenum	0.013	mg/L		0.005		E200.8	09/17/14 14:57 / dck
Nickel	0.004	mg/L		0.002		E200.8	09/17/14 14:57 / dck
Potassium	5	mg/L		1		E200.8	09/17/14 14:57 / dck
Selenium	ND	mg/L		0.001		E200.8	09/17/14 14:57 / dck
Silver	ND	mg/L		0.0002		E200.8	09/17/14 14:57 / dck
Sodium	36	mg/L		1		E200.8	09/17/14 14:57 / dck
Uranium	0.0041	mg/L		0.0002		E200.8	09/17/14 14:57 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/17/14 14:57 / dck
Zinc	0.599	mg/L		0.008		E200.8	09/17/14 14:57 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-024
Client Sample ID: P-39R

Report Date: 10/01/14
Collection Date: 09/04/14 16:15
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	310	mg/L		4		A2320 B	09/09/14 15:30 / SRW
Bicarbonate as HCO3	370	mg/L		4		A2320 B	09/09/14 15:30 / SRW
Chloride	140	mg/L		1		E300.0	09/09/14 23:10 / SRW
Sulfate	260	mg/L		1		E300.0	09/09/14 23:10 / SRW
Hardness as CaCO3	542	mg/L		1		A2340 B	09/10/14 12:08 / abb
METALS, DISSOLVED							
Aluminum	0.068	mg/L		0.009		E200.7	09/10/14 12:08 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 06:57 / dck
Arsenic	0.011	mg/L		0.001		E200.8	09/11/14 06:57 / dck
Barium	0.136	mg/L		0.003		E200.8	09/11/14 06:57 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 06:57 / dck
Boron	0.2	mg/L		0.1		E200.7	09/10/14 12:08 / sld
Cadmium	0.00022	mg/L		0.00003		E200.8	09/11/14 06:57 / dck
Calcium	169	mg/L		1		E200.7	09/10/14 12:08 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 06:57 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 06:57 / dck
Copper	0.043	mg/L		0.001		E200.8	09/11/14 06:57 / dck
Iron	0.06	mg/L		0.02		E200.8	09/11/14 06:57 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 06:57 / dck
Magnesium	29	mg/L		1		E200.7	09/10/14 12:08 / sld
Manganese	0.004	mg/L		0.001		E200.8	09/11/14 06:57 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 17:15 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 06:57 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 06:57 / dck
Potassium	13	mg/L		1		E200.7	09/10/14 12:08 / sld
Selenium	0.002	mg/L		0.001		E200.8	09/11/14 06:57 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 06:57 / dck
Sodium	91	mg/L		1		E200.7	09/10/14 12:08 / sld
Uranium	0.0330	mg/L		0.0002		E200.8	09/11/14 06:57 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 06:57 / dck
Zinc	0.022	mg/L		0.008		E200.8	09/11/14 06:57 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-025
Client Sample ID: P-37A

Report Date: 10/01/14
Collection Date: 09/04/14 15:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	180	mg/L		4		A2320 B	09/09/14 15:39 / SRW
Bicarbonate as HCO3	220	mg/L		4		A2320 B	09/09/14 15:39 / SRW
Chloride	93	mg/L		1		E300.0	09/09/14 23:21 / SRW
Sulfate	200	mg/L		1		E300.0	09/09/14 23:21 / SRW
Hardness as CaCO3	342	mg/L		1		A2340 B	09/10/14 12:12 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 12:12 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:02 / dck
Arsenic	0.003	mg/L		0.001		E200.8	09/11/14 07:02 / dck
Barium	0.031	mg/L		0.003		E200.8	09/11/14 07:02 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:02 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:12 / sld
Cadmium	0.00589	mg/L		0.00003		E200.8	09/11/14 07:02 / dck
Calcium	105	mg/L		1		E200.7	09/10/14 12:12 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:02 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:02 / dck
Copper	0.025	mg/L		0.001		E200.8	09/11/14 07:02 / dck
Iron	0.09	mg/L		0.02		E200.8	09/11/14 07:02 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:02 / dck
Magnesium	19	mg/L		1		E200.7	09/10/14 12:12 / sld
Manganese	2.67	mg/L		0.001		E200.7	09/10/14 12:12 / sld
Mercury	0.000076	mg/L		5E-06		E245.1	09/24/14 12:02 / rgk
Molybdenum	0.008	mg/L		0.005		E200.8	09/11/14 07:02 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 07:02 / dck
Potassium	7	mg/L		1		E200.7	09/10/14 12:12 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:02 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:02 / dck
Sodium	62	mg/L		1		E200.7	09/10/14 12:12 / sld
Uranium	0.0059	mg/L		0.0002		E200.8	09/11/14 07:02 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:02 / dck
Zinc	0.269	mg/L		0.008		E200.8	09/11/14 07:02 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-026
Client Sample ID: GW-ST-ES

Report Date: 10/01/14
Collection Date: 09/05/14 13:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	6	mg/L		4		A2320 B	09/09/14 16:15 / SRW
Bicarbonate as HCO3	6	mg/L		4		A2320 B	09/09/14 16:15 / SRW
Chloride	35	mg/L		1		E300.0	09/09/14 23:32 / SRW
Sulfate	110	mg/L		1		E300.0	09/09/14 23:32 / SRW
Hardness as CaCO3	101	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	0.170	mg/L		0.009		E200.8	09/16/14 19:41 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/16/14 19:41 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/16/14 19:41 / dck
Barium	0.194	mg/L		0.003		E200.8	09/16/14 19:41 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 19:41 / dck
Boron	ND	mg/L		0.1		E200.8	09/16/14 19:41 / dck
Cadmium	0.0189	mg/L		0.00003		E200.8	09/16/14 19:41 / dck
Calcium	32	mg/L		1		E200.8	09/16/14 19:41 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 19:41 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 19:41 / dck
Copper	1.19	mg/L		0.001		E200.8	09/16/14 19:41 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 19:41 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 19:41 / dck
Magnesium	5	mg/L		1		E200.8	09/16/14 19:41 / dck
Manganese	1.26	mg/L		0.001		E200.8	09/16/14 19:41 / dck
Mercury	8.8E-06	mg/L		5E-06		E245.1	09/24/14 12:07 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/16/14 19:41 / dck
Nickel	0.009	mg/L		0.002		E200.8	09/16/14 19:41 / dck
Potassium	5	mg/L		1		E200.8	09/16/14 19:41 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 19:41 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 19:41 / dck
Sodium	22	mg/L		1		E200.8	09/16/14 19:41 / dck
Uranium	0.0004	mg/L		0.0002		E200.8	09/16/14 19:41 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 19:41 / dck
Zinc	3.50	mg/L		0.008		E200.8	09/16/14 19:41 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-027
Client Sample ID: GW-ST-WS

Report Date: 10/01/14
Collection Date: 09/05/14 14:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	33	mg/L		4		A2320 B	09/09/14 16:24 / SRW
Bicarbonate as HCO3	40	mg/L		4		A2320 B	09/09/14 16:24 / SRW
Chloride	38	mg/L		1		E300.0	09/09/14 23:43 / SRW
Sulfate	87	mg/L		1		E300.0	09/09/14 23:43 / SRW
Hardness as CaCO3	111	mg/L		1		A2340 B	09/10/14 12:15 / abb
METALS, DISSOLVED							
Aluminum	0.120	mg/L		0.009		E200.8	09/17/14 15:02 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:06 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 07:06 / dck
Barium	0.024	mg/L		0.003		E200.8	09/11/14 07:06 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:06 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:15 / sld
Cadmium	0.0222	mg/L		0.00003		E200.8	09/11/14 07:06 / dck
Calcium	33	mg/L		1		E200.7	09/10/14 12:15 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:06 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:06 / dck
Copper	0.116	mg/L		0.001		E200.8	09/11/14 07:06 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 07:06 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:06 / dck
Magnesium	7	mg/L		1		E200.7	09/10/14 12:15 / sld
Manganese	2.17	mg/L		0.001		E200.7	09/10/14 12:15 / sld
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 17:45 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 07:06 / dck
Nickel	0.013	mg/L		0.002		E200.8	09/11/14 07:06 / dck
Potassium	4	mg/L		1		E200.7	09/10/14 12:15 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:06 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:06 / dck
Sodium	21	mg/L		1		E200.7	09/10/14 12:15 / sld
Uranium	0.0008	mg/L		0.0002		E200.8	09/11/14 07:06 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:06 / dck
Zinc	3.87	mg/L		0.008		E200.7	09/10/14 12:15 / sld

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-028
Client Sample ID: GW-MC-NS

Report Date: 10/01/14
Collection Date: 09/04/14 19:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	42	mg/L		4		A2320 B	09/15/14 17:33 / SRW
Bicarbonate as HCO3	51	mg/L		4		A2320 B	09/15/14 17:33 / SRW
Chloride	42	mg/L		1		E300.0	09/09/14 23:54 / SRW
Sulfate	100	mg/L		1		E300.0	09/09/14 23:54 / SRW
Hardness as CaCO3	101	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	0.253	mg/L		0.009		E200.7	09/10/14 12:19 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:10 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 07:10 / dck
Barium	0.030	mg/L		0.003		E200.8	09/11/14 07:10 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:10 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:19 / sld
Cadmium	0.0247	mg/L		0.00003		E200.8	09/11/14 07:10 / dck
Calcium	28	mg/L		1		E200.7	09/10/14 12:19 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:10 / dck
Cobalt	0.01	mg/L		0.01		E200.8	09/11/14 07:10 / dck
Copper	0.301	mg/L		0.001		E200.8	09/11/14 07:10 / dck
Iron	0.19	mg/L		0.02		E200.8	09/11/14 07:10 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:10 / dck
Magnesium	8	mg/L		1		E200.7	09/10/14 12:19 / sld
Manganese	4.66	mg/L		0.001		E200.7	09/10/14 12:19 / sld
Mercury	9.0E-06	mg/L		5E-06		E245.1	09/24/14 12:11 / rgk
Molybdenum	0.006	mg/L		0.005		E200.8	09/11/14 07:10 / dck
Nickel	0.014	mg/L		0.002		E200.8	09/11/14 07:10 / dck
Potassium	5	mg/L		1		E200.7	09/10/14 12:19 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:10 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:10 / dck
Sodium	31	mg/L		1		E200.7	09/10/14 12:19 / sld
Uranium	0.0015	mg/L		0.0002		E200.8	09/11/14 07:10 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:10 / dck
Zinc	7.79	mg/L		0.008		E200.7	09/10/14 12:19 / sld

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-029
Client Sample ID: GW-RK-BG

Report Date: 10/01/14
Collection Date: 09/04/14 12:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	140	mg/L		4		A2320 B	09/09/14 16:52 / SRW
Bicarbonate as HCO3	170	mg/L		4		A2320 B	09/09/14 16:52 / SRW
Chloride	35	mg/L		1		E300.0	09/10/14 00:05 / SRW
Sulfate	97	mg/L		1		E300.0	09/10/14 00:05 / SRW
Hardness as CaCO3	205	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 20:07 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/16/14 20:07 / dck
Arsenic	0.007	mg/L		0.001		E200.8	09/16/14 20:07 / dck
Barium	0.061	mg/L		0.003		E200.8	09/16/14 20:07 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 20:07 / dck
Boron	ND	mg/L		0.1		E200.8	09/16/14 20:07 / dck
Cadmium	0.00005	mg/L		0.00003		E200.8	09/16/14 20:07 / dck
Calcium	60	mg/L		1		E200.8	09/16/14 20:07 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 20:07 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 20:07 / dck
Copper	ND	mg/L		0.001		E200.8	09/16/14 20:07 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 20:07 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 20:07 / dck
Magnesium	14	mg/L		1		E200.8	09/16/14 20:07 / dck
Manganese	ND	mg/L		0.001		E200.8	09/16/14 20:07 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/24/14 12:15 / rgk
Molybdenum	0.013	mg/L		0.005		E200.8	09/16/14 20:07 / dck
Nickel	ND	mg/L		0.002		E200.8	09/16/14 20:07 / dck
Potassium	5	mg/L		1		E200.8	09/16/14 20:07 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 20:07 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 20:07 / dck
Sodium	39	mg/L		1		E200.8	09/16/14 20:07 / dck
Uranium	0.0068	mg/L		0.0002		E200.8	09/16/14 20:07 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 20:07 / dck
Zinc	ND	mg/L		0.008		E200.8	09/16/14 20:07 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-030
Client Sample ID: P-39R DUP

Report Date: 10/01/14
Collection Date: 09/04/14 16:15
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	310	mg/L		4		A2320 B	09/09/14 16:59 / SRW
Bicarbonate as HCO3	370	mg/L		4		A2320 B	09/09/14 16:59 / SRW
Chloride	140	mg/L		1		E300.0	09/10/14 00:16 / SRW
Sulfate	260	mg/L		1		E300.0	09/10/14 00:16 / SRW
Hardness as CaCO3	555	mg/L		1		A2340 B	09/10/14 12:30 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 12:30 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:28 / dck
Arsenic	0.011	mg/L		0.001		E200.8	09/11/14 07:28 / dck
Barium	0.134	mg/L		0.003		E200.8	09/11/14 07:28 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:28 / dck
Boron	0.2	mg/L		0.1		E200.7	09/10/14 12:30 / sld
Cadmium	0.00020	mg/L		0.00003		E200.8	09/11/14 07:28 / dck
Calcium	174	mg/L		1		E200.7	09/10/14 12:30 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:28 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:28 / dck
Copper	0.033	mg/L		0.001		E200.8	09/11/14 07:28 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 07:28 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:28 / dck
Magnesium	30	mg/L		1		E200.7	09/10/14 12:30 / sld
Manganese	0.002	mg/L		0.001		E200.8	09/11/14 07:28 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 17:58 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 07:28 / dck
Nickel	0.003	mg/L		0.002		E200.8	09/11/14 07:28 / dck
Potassium	14	mg/L		1		E200.7	09/10/14 12:30 / sld
Selenium	0.002	mg/L		0.001		E200.8	09/11/14 07:28 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:28 / dck
Sodium	95	mg/L		1		E200.7	09/10/14 12:30 / sld
Uranium	0.0323	mg/L		0.0002		E200.8	09/11/14 07:28 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:28 / dck
Zinc	0.019	mg/L		0.008		E200.8	09/11/14 07:28 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-031
Client Sample ID: MW-10

Report Date: 10/01/14
Collection Date: 09/04/14 12:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	8	mg/L		4		A2320 B	09/18/14 11:01 / SRW
Bicarbonate as HCO3	9	mg/L		4		A2320 B	09/18/14 11:01 / SRW
Chloride	49	mg/L		1		E300.0	09/10/14 00:28 / SRW
Sulfate	240	mg/L		1		E300.0	09/10/14 00:28 / SRW
Hardness as CaCO3	154	mg/L		1		A2340 B	09/19/14 08:41 / sld
METALS, DISSOLVED							
Aluminum	0.260	mg/L		0.009		E200.8	09/16/14 20:12 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/16/14 20:12 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/16/14 20:12 / dck
Barium	0.079	mg/L		0.003		E200.8	09/16/14 20:12 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 20:12 / dck
Boron	0.1	mg/L		0.1		E200.8	09/16/14 20:12 / dck
Cadmium	0.00342	mg/L		0.00003		E200.8	09/16/14 20:12 / dck
Calcium	44	mg/L		1		E200.8	09/16/14 20:12 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 20:12 / dck
Cobalt	0.02	mg/L		0.01		E200.8	09/16/14 20:12 / dck
Copper	0.297	mg/L		0.001		E200.8	09/16/14 20:12 / dck
Iron	0.02	mg/L		0.02		E200.8	09/16/14 20:12 / dck
Lead	0.0006	mg/L		0.0003		E200.8	09/16/14 20:12 / dck
Magnesium	11	mg/L		1		E200.8	09/16/14 20:12 / dck
Manganese	4.92	mg/L		0.001		E200.8	09/17/14 15:24 / dck
Mercury	6.4E-06	mg/L		5E-06		E245.1	09/24/14 12:19 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/16/14 20:12 / dck
Nickel	0.009	mg/L		0.002		E200.8	09/16/14 20:12 / dck
Potassium	6	mg/L		1		E200.8	09/16/14 20:12 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 20:12 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 20:12 / dck
Sodium	54	mg/L		1		E200.8	09/17/14 15:24 / dck
Uranium	0.0008	mg/L		0.0002		E200.8	09/16/14 20:12 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 20:12 / dck
Zinc	3.83	mg/L		0.008		E200.8	09/16/14 20:12 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-032
Client Sample ID: Field Blank

Report Date: 10/01/14
Collection Date: 09/04/14 19:40
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	09/09/14 17:14 / SRW
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	09/09/14 17:14 / SRW
Chloride	ND	mg/L		1		E300.0	09/10/14 01:01 / SRW
Sulfate	ND	mg/L		1		E300.0	09/10/14 01:01 / SRW
Hardness as CaCO3	ND	mg/L		1		A2340 B	09/10/14 12:45 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 20:16 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:33 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/11/14 07:33 / dck
Barium	ND	mg/L		0.003		E200.8	09/11/14 07:33 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:33 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:45 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 07:33 / dck
Calcium	ND	mg/L		1		E200.7	09/10/14 12:45 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:33 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:33 / dck
Copper	ND	mg/L		0.001		E200.8	09/11/14 07:33 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 07:33 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:33 / dck
Magnesium	ND	mg/L		1		E200.7	09/10/14 12:45 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 07:33 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 18:06 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 07:33 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 07:33 / dck
Potassium	ND	mg/L		1		E200.7	09/10/14 12:45 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:33 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:33 / dck
Sodium	ND	mg/L		1		E200.7	09/10/14 12:45 / sld
Uranium	ND	mg/L		0.0002		E200.8	09/11/14 07:33 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:33 / dck
Zinc	0.010	mg/L		0.008		E200.8	09/16/14 20:16 / dck

-Zinc was confirmed by duplicate data.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-033
Client Sample ID: GW-MC-BG

Report Date: 10/01/14
Collection Date: 09/04/14 17:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	270	mg/L		4		A2320 B	09/09/14 17:19 / SRW
Bicarbonate as HCO3	330	mg/L		4		A2320 B	09/09/14 17:19 / SRW
Chloride	75	mg/L		1		E300.0	09/10/14 01:34 / SRW
Sulfate	250	mg/L		1		E300.0	09/10/14 01:34 / SRW
Hardness as CaCO3	118	mg/L		1		A2340 B	09/10/14 12:49 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.7	09/10/14 12:49 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:37 / dck
Arsenic	0.033	mg/L		0.001		E200.8	09/11/14 07:37 / dck
Barium	0.032	mg/L		0.003		E200.8	09/11/14 07:37 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:37 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:49 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 07:37 / dck
Calcium	34	mg/L		1		E200.7	09/10/14 12:49 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:37 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:37 / dck
Copper	0.001	mg/L		0.001		E200.8	09/11/14 07:37 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 07:37 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:37 / dck
Magnesium	8	mg/L		1		E200.7	09/10/14 12:49 / sld
Manganese	0.003	mg/L		0.001		E200.8	09/11/14 07:37 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/18/14 18:10 / rgk
Molybdenum	0.045	mg/L		0.005		E200.8	09/11/14 07:37 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 07:37 / dck
Potassium	5	mg/L		1		E200.7	09/10/14 12:49 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:37 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:37 / dck
Sodium	219	mg/L		1		E200.7	09/10/14 12:49 / sld
Uranium	0.0025	mg/L		0.0002		E200.8	09/11/14 07:37 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:37 / dck
Zinc	ND	mg/L		0.008		E200.8	09/11/14 07:37 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-034
Client Sample ID: P-114

Report Date: 10/01/14
Collection Date: 09/04/14 16:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	200	mg/L		4		A2320 B	09/09/14 17:26 / SRW
Bicarbonate as HCO3	240	mg/L		4		A2320 B	09/09/14 17:26 / SRW
Chloride	30	mg/L		1		E300.0	09/10/14 01:45 / SRW
Sulfate	110	mg/L		1		E300.0	09/10/14 01:45 / SRW
Hardness as CaCO3	160	mg/L		1		A2340 B	09/10/14 12:53 / abb
METALS, DISSOLVED							
Aluminum	0.289	mg/L		0.009		E200.7	09/10/14 12:53 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:42 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 07:42 / dck
Barium	0.019	mg/L		0.003		E200.8	09/11/14 07:42 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:42 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 12:53 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 07:42 / dck
Calcium	55	mg/L		1		E200.7	09/10/14 12:53 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:42 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:42 / dck
Copper	0.002	mg/L		0.001		E200.8	09/16/14 20:38 / dck
Iron	0.11	mg/L		0.02		E200.8	09/11/14 07:42 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 07:42 / dck
Magnesium	6	mg/L		1		E200.7	09/10/14 12:53 / sld
Manganese	0.004	mg/L		0.001		E200.8	09/11/14 07:42 / dck
Mercury	0.000088	mg/L		5E-06		E245.1	09/24/14 12:40 / rgk
Molybdenum	0.006	mg/L		0.005		E200.8	09/11/14 07:42 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 07:42 / dck
Potassium	4	mg/L		1		E200.7	09/10/14 12:53 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:42 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:42 / dck
Sodium	97	mg/L		1		E200.7	09/10/14 12:53 / sld
Uranium	0.0026	mg/L		0.0002		E200.8	09/11/14 07:42 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:42 / dck
Zinc	0.010	mg/L		0.008		E200.8	09/16/14 20:38 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-035
Client Sample ID: MW-01

Report Date: 10/01/14
Collection Date: 09/04/14 11:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	160	mg/L		4		A2320 B	09/09/14 17:32 / SRW
Bicarbonate as HCO3	200	mg/L		4		A2320 B	09/09/14 17:32 / SRW
Chloride	35	mg/L		1		E300.0	09/10/14 01:56 / SRW
Sulfate	260	mg/L		1		E300.0	09/10/14 01:56 / SRW
Hardness as CaCO3	354	mg/L		1		A2340 B	09/10/14 12:57 / abb
METALS, DISSOLVED							
Aluminum	0.094	mg/L		0.009		E200.7	09/10/14 12:57 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 07:46 / dck
Arsenic	0.011	mg/L		0.001		E200.8	09/11/14 07:46 / dck
Barium	0.025	mg/L		0.003		E200.8	09/11/14 07:46 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 07:46 / dck
Boron	0.1	mg/L		0.1		E200.7	09/10/14 12:57 / sld
Cadmium	0.00104	mg/L		0.00003		E200.8	09/11/14 07:46 / dck
Calcium	108	mg/L		1		E200.7	09/10/14 12:57 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 07:46 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 07:46 / dck
Copper	0.079	mg/L		0.001		E200.8	09/11/14 07:46 / dck
Iron	0.20	mg/L		0.02		E200.8	09/11/14 07:46 / dck
Lead	0.0003	mg/L		0.0003		E200.8	09/11/14 07:46 / dck
Magnesium	20	mg/L		1		E200.7	09/10/14 12:57 / sld
Manganese	0.612	mg/L		0.001		E200.7	09/10/14 12:57 / sld
Mercury	7.1E-06	mg/L		5E-06		E245.1	09/24/14 12:44 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 07:46 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 07:46 / dck
Potassium	7	mg/L		1		E200.7	09/10/14 12:57 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 07:46 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 07:46 / dck
Sodium	32	mg/L		1		E200.7	09/10/14 12:57 / sld
Uranium	0.0066	mg/L		0.0002		E200.8	09/11/14 07:46 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 07:46 / dck
Zinc	0.146	mg/L		0.008		E200.8	09/11/14 07:46 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-036
Client Sample ID: P-58A

Report Date: 10/01/14
Collection Date: 09/04/14 15:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	40	mg/L		4		A2320 B	09/09/14 17:39 / SRW
Bicarbonate as HCO3	48	mg/L		4		A2320 B	09/09/14 17:39 / SRW
Chloride	31	mg/L		1		E300.0	09/10/14 02:08 / SRW
Sulfate	190	mg/L		1		E300.0	09/10/14 02:08 / SRW
Hardness as CaCO3	163	mg/L		1		A2340 B	09/10/14 13:00 / abb
METALS, DISSOLVED							
Aluminum	0.299	mg/L		0.009		E200.7	09/10/14 13:00 / sld
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 08:04 / dck
Arsenic	0.003	mg/L		0.001		E200.8	09/11/14 08:04 / dck
Barium	0.040	mg/L		0.003		E200.8	09/11/14 08:04 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 08:04 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 13:00 / sld
Cadmium	0.00220	mg/L		0.00003		E200.8	09/11/14 08:04 / dck
Calcium	50	mg/L		1		E200.7	09/10/14 13:00 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 08:04 / dck
Cobalt	0.02	mg/L		0.01		E200.8	09/11/14 08:04 / dck
Copper	0.041	mg/L		0.001		E200.8	09/11/14 08:04 / dck
Iron	10.3	mg/L		0.02		E200.7	09/10/14 13:00 / sld
Lead	0.0004	mg/L		0.0003		E200.8	09/11/14 08:04 / dck
Magnesium	9	mg/L		1		E200.7	09/10/14 13:00 / sld
Manganese	7.36	mg/L		0.001		E200.7	09/10/14 13:00 / sld
Mercury	6.0E-06	mg/L		5E-06		E245.1	09/24/14 12:49 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 08:04 / dck
Nickel	0.005	mg/L		0.002		E200.8	09/11/14 08:04 / dck
Potassium	7	mg/L		1		E200.7	09/10/14 13:00 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 08:04 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 08:04 / dck
Sodium	26	mg/L		1		E200.7	09/10/14 13:00 / sld
Uranium	0.0005	mg/L		0.0002		E200.8	09/11/14 08:04 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 08:04 / dck
Zinc	3.07	mg/L		0.008		E200.7	09/10/14 13:00 / sld

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-037
Client Sample ID: GW-MC-SS

Report Date: 10/01/14
Collection Date: 09/04/14 17:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	96	mg/L		4		A2320 B	09/09/14 17:46 / SRW
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/09/14 17:46 / SRW
Chloride	43	mg/L		1		E300.0	09/10/14 02:19 / SRW
Sulfate	91	mg/L		1		E300.0	09/10/14 02:19 / SRW
Hardness as CaCO3	148	mg/L		1		A2340 B	09/16/14 20:51 / abb
METALS, DISSOLVED							
Aluminum	0.012	mg/L		0.009		E200.8	09/16/14 20:51 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/16/14 20:51 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/16/14 20:51 / dck
Barium	0.106	mg/L		0.003		E200.8	09/16/14 20:51 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 20:51 / dck
Boron	ND	mg/L		0.1		E200.8	09/16/14 20:51 / dck
Cadmium	0.00619	mg/L		0.00003		E200.8	09/16/14 20:51 / dck
Calcium	40	mg/L		1		E200.8	09/16/14 20:51 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 20:51 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 20:51 / dck
Copper	0.043	mg/L		0.001		E200.8	09/16/14 20:51 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 20:51 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 20:51 / dck
Magnesium	12	mg/L		1		E200.8	09/16/14 20:51 / dck
Manganese	5.68	mg/L		0.001		E200.8	09/17/14 15:32 / dck
Mercury	0.000019	mg/L		5E-06		E245.1	09/24/14 12:53 / rgk
Molybdenum	0.031	mg/L		0.005		E200.8	09/16/14 20:51 / dck
Nickel	0.015	mg/L		0.002		E200.8	09/16/14 20:51 / dck
Potassium	6	mg/L		1		E200.8	09/16/14 20:51 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 20:51 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 20:51 / dck
Sodium	34	mg/L		1		E200.8	09/16/14 20:51 / dck
Uranium	0.0015	mg/L		0.0002		E200.8	09/16/14 20:51 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 20:51 / dck
Zinc	3.81	mg/L		0.008		E200.8	09/16/14 20:51 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-038
Client Sample ID: GW-CR-ES

Report Date: 10/01/14
Collection Date: 09/05/14 12:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	96	mg/L		4		A2320 B	09/09/14 17:53 / SRW
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/09/14 17:53 / SRW
Chloride	36	mg/L		1		E300.0	09/10/14 02:30 / SRW
Sulfate	170	mg/L		1		E300.0	09/10/14 02:30 / SRW
Hardness as CaCO3	158	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	0.030	mg/L		0.009		E200.8	09/16/14 20:56 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 08:08 / dck
Arsenic	ND	mg/L		0.001		E200.8	09/11/14 08:08 / dck
Barium	0.022	mg/L		0.003		E200.8	09/11/14 08:08 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 08:08 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 13:04 / sld
Cadmium	0.00239	mg/L		0.00003		E200.8	09/11/14 08:08 / dck
Calcium	46	mg/L		1		E200.7	09/10/14 13:04 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 08:08 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 08:08 / dck
Copper	0.004	mg/L		0.001		E200.8	09/11/14 08:08 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 08:08 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 08:08 / dck
Magnesium	10	mg/L		1		E200.7	09/10/14 13:04 / sld
Manganese	0.039	mg/L		0.001		E200.8	09/11/14 08:08 / dck
Mercury	8.3E-06	mg/L		5E-06		E245.1	09/24/14 12:57 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 08:08 / dck
Nickel	0.003	mg/L		0.002		E200.8	09/11/14 08:08 / dck
Potassium	3	mg/L		1		E200.8	09/11/14 08:08 / dck
Selenium	ND	mg/L		0.001		E200.8	09/11/14 08:08 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 08:08 / dck
Sodium	70	mg/L		1		E200.7	09/10/14 13:04 / sld
Uranium	0.0013	mg/L		0.0002		E200.8	09/11/14 08:08 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 08:08 / dck
Zinc	0.625	mg/L		0.008		E200.8	09/11/14 08:08 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-039
Client Sample ID: GW-FM-WS DUP

Report Date: 10/01/14
Collection Date: 09/05/14 09:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	130	mg/L		4		A2320 B	09/09/14 18:00 / SRW
Bicarbonate as HCO3	160	mg/L		4		A2320 B	09/09/14 18:00 / SRW
Chloride	23	mg/L		1		E300.0	09/10/14 02:41 / SRW
Sulfate	59	mg/L		1		E300.0	09/10/14 02:41 / SRW
Hardness as CaCO3	168	mg/L		1		A2340 B	09/10/14 13:52 / abb
METALS, DISSOLVED							
Aluminum	0.037	mg/L		0.009		E200.8	09/16/14 21:00 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 08:12 / dck
Arsenic	0.003	mg/L		0.001		E200.8	09/11/14 08:12 / dck
Barium	0.116	mg/L		0.003		E200.8	09/11/14 08:12 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 08:12 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 13:52 / sld
Cadmium	ND	mg/L		0.00003		E200.8	09/11/14 08:12 / dck
Calcium	50	mg/L		1		E200.7	09/10/14 13:52 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 08:12 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 08:12 / dck
Copper	0.008	mg/L		0.001		E200.8	09/11/14 08:12 / dck
Iron	0.04	mg/L		0.02		E200.8	09/11/14 08:12 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 08:12 / dck
Magnesium	10	mg/L		1		E200.7	09/10/14 13:52 / sld
Manganese	1.60	mg/L		0.001		E200.7	09/10/14 13:52 / sld
Mercury	5.9E-06	mg/L		5E-06		E245.1	09/24/14 13:01 / rgk
Molybdenum	0.009	mg/L		0.005		E200.8	09/11/14 08:12 / dck
Nickel	0.003	mg/L		0.002		E200.8	09/11/14 08:12 / dck
Potassium	4	mg/L		1		E200.7	09/10/14 13:52 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 08:12 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 08:12 / dck
Sodium	23	mg/L		1		E200.7	09/10/14 13:52 / sld
Uranium	0.0070	mg/L		0.0002		E200.8	09/11/14 08:12 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 08:12 / dck
Zinc	0.017	mg/L		0.008		E200.8	09/11/14 08:12 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-040
Client Sample ID: GW-FM-WS

Report Date: 10/01/14
Collection Date: 09/05/14 09:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	140	mg/L		4		A2320 B	09/09/14 18:07 / SRW
Bicarbonate as HCO3	170	mg/L		4		A2320 B	09/09/14 18:07 / SRW
Chloride	23	mg/L		1		E300.0	09/10/14 02:52 / SRW
Sulfate	58	mg/L		1		E300.0	09/10/14 02:52 / SRW
Hardness as CaCO3	178	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	0.017	mg/L		0.009		E200.8	09/16/14 21:05 / dck
Antimony	0.0014	mg/L		0.0005		E200.8	09/16/14 21:05 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/16/14 21:05 / dck
Barium	0.220	mg/L		0.003		E200.8	09/16/14 21:05 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 21:05 / dck
Boron	ND	mg/L		0.1		E200.8	09/16/14 21:05 / dck
Cadmium	0.00018	mg/L		0.00003		E200.8	09/16/14 21:05 / dck
Calcium	53	mg/L		1		E200.8	09/16/14 21:05 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 21:05 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 21:05 / dck
Copper	0.011	mg/L		0.001		E200.8	09/16/14 21:05 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 21:05 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 21:05 / dck
Magnesium	11	mg/L		1		E200.8	09/16/14 21:05 / dck
Manganese	1.48	mg/L		0.001		E200.8	09/16/14 21:05 / dck
Mercury	7.5E-06	mg/L		5E-06		E245.1	09/24/14 13:06 / rgk
Molybdenum	0.014	mg/L		0.005		E200.8	09/16/14 21:05 / dck
Nickel	0.003	mg/L		0.002		E200.8	09/16/14 21:05 / dck
Potassium	5	mg/L		1		E200.8	09/16/14 21:05 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 21:05 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 21:05 / dck
Sodium	25	mg/L		1		E200.8	09/16/14 21:05 / dck
Uranium	0.0168	mg/L		0.0002		E200.8	09/16/14 21:05 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 21:05 / dck
Zinc	0.120	mg/L		0.008		E200.8	09/16/14 21:05 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-041
Client Sample ID: GW-FM-ES

Report Date: 10/01/14
Collection Date: 09/05/14 09:15
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	09/09/14 18:15 / SRW
Bicarbonate as HCO3	120	mg/L		4		A2320 B	09/09/14 18:15 / SRW
Chloride	30	mg/L		1		E300.0	09/10/14 03:03 / SRW
Sulfate	78	mg/L		1		E300.0	09/10/14 03:03 / SRW
Hardness as CaCO3	148	mg/L		1		A2340 B	09/10/14 13:56 / abb
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 21:09 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 08:30 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 08:30 / dck
Barium	0.038	mg/L		0.003		E200.8	09/11/14 08:30 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 08:30 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 13:56 / sld
Cadmium	0.00005	mg/L		0.00003		E200.8	09/11/14 08:30 / dck
Calcium	45	mg/L		1		E200.7	09/10/14 13:56 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 08:30 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 08:30 / dck
Copper	0.001	mg/L		0.001		E200.8	09/11/14 08:30 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 08:30 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 08:30 / dck
Magnesium	9	mg/L		1		E200.7	09/10/14 13:56 / sld
Manganese	0.966	mg/L		0.001		E200.7	09/10/14 13:56 / sld
Mercury	0.000016	mg/L		5E-06		E245.1	09/24/14 13:10 / rgk
Molybdenum	0.006	mg/L		0.005		E200.8	09/11/14 08:30 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 08:30 / dck
Potassium	4	mg/L		1		E200.7	09/10/14 13:56 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 08:30 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 08:30 / dck
Sodium	29	mg/L		1		E200.7	09/10/14 13:56 / sld
Uranium	0.0015	mg/L		0.0002		E200.8	09/11/14 08:30 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 08:30 / dck
Zinc	0.306	mg/L		0.008		E200.8	09/11/14 08:30 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-042
Client Sample ID: GW-FM-BG

Report Date: 10/01/14
Collection Date: 09/05/14 10:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	40	mg/L		4		A2320 B	09/09/14 18:22 / SRW
Bicarbonate as HCO3	48	mg/L		4		A2320 B	09/09/14 18:22 / SRW
Chloride	23	mg/L		1		E300.0	09/11/14 14:08 / SRW
Sulfate	99	mg/L		1		E300.0	09/11/14 14:08 / SRW
Hardness as CaCO3	114	mg/L		1		A2340 B	09/10/14 14:00 / abb
METALS, DISSOLVED							
Aluminum	0.029	mg/L		0.009		E200.8	09/16/14 21:35 / dck
Antimony	ND	mg/L		0.0005		E200.8	09/11/14 08:35 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/11/14 08:35 / dck
Barium	0.035	mg/L		0.003		E200.8	09/11/14 08:35 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 08:35 / dck
Boron	ND	mg/L		0.1		E200.7	09/10/14 14:00 / sld
Cadmium	0.00032	mg/L		0.00003		E200.8	09/11/14 08:35 / dck
Calcium	34	mg/L		1		E200.7	09/10/14 14:00 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 08:35 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 08:35 / dck
Copper	0.001	mg/L		0.001		E200.8	09/11/14 08:35 / dck
Iron	0.03	mg/L		0.02		E200.8	09/16/14 21:35 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 08:35 / dck
Magnesium	7	mg/L		1		E200.7	09/10/14 14:00 / sld
Manganese	0.312	mg/L		0.001		E200.8	09/11/14 08:35 / dck
Mercury	0.000010	mg/L		5E-06		E245.1	09/24/14 13:14 / rgk
Molybdenum	ND	mg/L		0.005		E200.8	09/11/14 08:35 / dck
Nickel	0.005	mg/L		0.002		E200.8	09/11/14 08:35 / dck
Potassium	5	mg/L		1		E200.7	09/10/14 14:00 / sld
Selenium	ND	mg/L		0.001		E200.8	09/11/14 08:35 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 08:35 / dck
Sodium	23	mg/L		1		E200.7	09/10/14 14:00 / sld
Uranium	ND	mg/L		0.0002		E200.8	09/11/14 08:35 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 08:35 / dck
Zinc	0.009	mg/L		0.008		E200.8	09/11/14 08:35 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-043
Client Sample ID: GW-FR-ES

Report Date: 10/01/14
Collection Date: 09/05/14 16:15
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	660	mg/L		4		A2320 B	09/09/14 18:29 / SRW
Bicarbonate as HCO3	800	mg/L		4		A2320 B	09/09/14 18:29 / SRW
Chloride	30	mg/L		1		E300.0	09/11/14 14:41 / SRW
Sulfate	280	mg/L		1		E300.0	09/11/14 14:41 / SRW
Hardness as CaCO3	410	mg/L		1		A2340 B	09/19/14 08:41 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 21:40 / dck
Antimony	0.0023	mg/L		0.0005		E200.8	09/16/14 21:40 / dck
Arsenic	0.002	mg/L		0.001		E200.8	09/16/14 21:40 / dck
Barium	0.203	mg/L		0.003		E200.8	09/16/14 21:40 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 21:40 / dck
Boron	ND	mg/L		0.1		E200.8	09/17/14 15:50 / dck
Cadmium	0.00020	mg/L		0.00003		E200.8	09/16/14 21:40 / dck
Calcium	125	mg/L		1		E200.8	09/16/14 21:40 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 21:40 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 21:40 / dck
Copper	0.004	mg/L		0.001		E200.8	09/16/14 21:40 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 21:40 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 21:40 / dck
Magnesium	24	mg/L		1		E200.8	09/16/14 21:40 / dck
Manganese	0.320	mg/L		0.001		E200.8	09/16/14 21:40 / dck
Mercury	ND	mg/L		5E-06		E245.1	09/24/14 13:18 / rgk
Molybdenum	0.034	mg/L		0.005		E200.8	09/16/14 21:40 / dck
Nickel	ND	mg/L		0.002		E200.8	09/16/14 21:40 / dck
Potassium	4	mg/L		1		E200.8	09/16/14 21:40 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 21:40 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 21:40 / dck
Sodium	19	mg/L		1		E200.8	09/16/14 21:40 / dck
Uranium	0.118	mg/L		0.0002		E200.8	09/16/14 21:40 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 21:40 / dck
Zinc	0.059	mg/L		0.008		E200.8	09/16/14 21:40 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-044
Client Sample ID: GW-FR-WS

Report Date: 10/01/14
Collection Date: 09/05/14 15:30
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	490	mg/L		4		A2320 B	09/11/14 17:14 / SRW
Bicarbonate as HCO3	600	mg/L		4		A2320 B	09/11/14 17:14 / SRW
Chloride	ND	mg/L		1		E300.0	09/11/14 14:52 / SRW
Sulfate	32	mg/L		1		E300.0	09/11/14 14:52 / SRW
Hardness as CaCO3	151	mg/L		1		A2340 B	09/19/14 08:41 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 21:44 / dck
Antimony	0.0058	mg/L		0.0005		E200.8	09/16/14 21:44 / dck
Arsenic	0.007	mg/L		0.001		E200.8	09/16/14 21:44 / dck
Barium	0.168	mg/L		0.003		E200.8	09/16/14 21:44 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 21:44 / dck
Boron	ND	mg/L		0.1		E200.8	09/17/14 15:54 / dck
Cadmium	0.00012	mg/L		0.00003		E200.8	09/16/14 21:44 / dck
Calcium	46	mg/L		1		E200.8	09/16/14 21:44 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 21:44 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 21:44 / dck
Copper	0.005	mg/L		0.001		E200.8	09/16/14 21:44 / dck
Iron	ND	mg/L		0.02		E200.8	09/16/14 21:44 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 21:44 / dck
Magnesium	9	mg/L		1		E200.8	09/16/14 21:44 / dck
Manganese	0.024	mg/L		0.001		E200.8	09/16/14 21:44 / dck
Mercury	0.000021	mg/L		5E-06		E245.1	09/24/14 13:48 / rgk
Molybdenum	0.016	mg/L		0.005		E200.8	09/16/14 21:44 / dck
Nickel	ND	mg/L		0.002		E200.8	09/16/14 21:44 / dck
Potassium	3	mg/L		1		E200.8	09/16/14 21:44 / dck
Selenium	ND	mg/L		0.001		E200.8	09/16/14 21:44 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 21:44 / dck
Sodium	12	mg/L		1		E200.8	09/16/14 21:44 / dck
Uranium	0.0635	mg/L		0.0002		E200.8	09/16/14 21:44 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 21:44 / dck
Zinc	0.032	mg/L		0.008		E200.8	09/16/14 21:44 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-045
Client Sample ID: GW-FR-BG

Report Date: 10/01/14
Collection Date: 09/04/14 14:45
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	880	mg/L		4		A2320 B	09/15/14 17:40 / SRW
Bicarbonate as HCO3	1100	mg/L		4		A2320 B	09/15/14 17:40 / SRW
Chloride	ND	mg/L		1		E300.0	09/11/14 15:03 / SRW
Sulfate	16	mg/L		1		E300.0	09/11/14 15:03 / SRW
Hardness as CaCO3	112	mg/L		1		A2340 B	09/19/14 08:41 / sld
METALS, DISSOLVED							
Aluminum	0.033	mg/L		0.009		E200.8	09/16/14 21:48 / dck
Antimony	0.0111	mg/L		0.0005		E200.8	09/16/14 21:48 / dck
Arsenic	0.013	mg/L		0.001		E200.8	09/16/14 21:48 / dck
Barium	0.143	mg/L		0.003		E200.8	09/16/14 21:48 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/16/14 21:48 / dck
Boron	ND	mg/L		0.1		E200.8	09/17/14 15:59 / dck
Cadmium	0.00015	mg/L		0.00003		E200.8	09/16/14 21:48 / dck
Calcium	33	mg/L		1		E200.8	09/16/14 21:48 / dck
Chromium	ND	mg/L		0.01		E200.8	09/16/14 21:48 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/16/14 21:48 / dck
Copper	0.005	mg/L		0.001		E200.8	09/16/14 21:48 / dck
Iron	0.04	mg/L		0.02		E200.8	09/16/14 21:48 / dck
Lead	ND	mg/L		0.0003		E200.8	09/16/14 21:48 / dck
Magnesium	7	mg/L		1		E200.8	09/16/14 21:48 / dck
Manganese	0.224	mg/L		0.001		E200.8	09/16/14 21:48 / dck
Mercury	9.5E-06	mg/L		5E-06		E245.1	09/24/14 13:52 / rgk
Molybdenum	0.010	mg/L		0.005		E200.8	09/16/14 21:48 / dck
Nickel	ND	mg/L		0.002		E200.8	09/16/14 21:48 / dck
Potassium	2	mg/L		1		E200.8	09/16/14 21:48 / dck
Selenium	0.002	mg/L		0.001		E200.8	09/16/14 21:48 / dck
Silver	ND	mg/L		0.0002		E200.8	09/16/14 21:48 / dck
Sodium	9	mg/L		1		E200.8	09/16/14 21:48 / dck
Uranium	0.0151	mg/L		0.0002		E200.8	09/16/14 21:48 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/16/14 21:48 / dck
Zinc	0.037	mg/L		0.008		E200.8	09/16/14 21:48 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Lab ID: H14090136-046
Client Sample ID: LYS-02

Report Date: 10/01/14
Collection Date: 09/03/14 17:00
DateReceived: 09/08/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Alkalinity, Total as CaCO3	750	mg/L		4		A2320 B	09/09/14 21:13 / SRW
Bicarbonate as HCO3	910	mg/L		4		A2320 B	09/09/14 21:13 / SRW
Chloride	96	mg/L		1		E300.0	09/11/14 15:14 / SRW
Sulfate	8800	mg/L	D	2		E300.0	09/15/14 16:40 / SRW
Hardness as CaCO3	2160	mg/L		1		A2340 B	09/17/14 15:00 / sld
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.009		E200.8	09/16/14 21:53 / dck
Antimony	0.0007	mg/L		0.0005		E200.8	09/11/14 08:39 / dck
Arsenic	0.032	mg/L		0.001		E200.8	09/11/14 08:39 / dck
Barium	0.015	mg/L		0.003		E200.8	09/11/14 08:39 / dck
Beryllium	ND	mg/L		0.0008		E200.8	09/11/14 08:39 / dck
Boron	0.7	mg/L		0.1		E200.7	09/10/14 14:04 / sld
Cadmium	0.00006	mg/L		0.00003		E200.8	09/11/14 08:39 / dck
Calcium	447	mg/L		1		E200.7	09/10/14 14:04 / sld
Chromium	ND	mg/L		0.01		E200.8	09/11/14 08:39 / dck
Cobalt	ND	mg/L		0.01		E200.8	09/11/14 08:39 / dck
Copper	0.010	mg/L		0.001		E200.8	09/11/14 08:39 / dck
Iron	ND	mg/L		0.02		E200.8	09/11/14 08:39 / dck
Lead	ND	mg/L		0.0003		E200.8	09/11/14 08:39 / dck
Magnesium	254	mg/L		1		E200.7	09/10/14 14:04 / sld
Manganese	ND	mg/L		0.001		E200.8	09/11/14 08:39 / dck
Mercury	6.9E-06	mg/L		5E-06		E245.1	09/24/14 13:56 / rgk
Molybdenum	0.060	mg/L		0.005		E200.8	09/11/14 08:39 / dck
Nickel	ND	mg/L		0.002		E200.8	09/11/14 08:39 / dck
Potassium	3	mg/L		1		E200.8	09/11/14 08:39 / dck
Selenium	0.028	mg/L		0.001		E200.8	09/11/14 08:39 / dck
Silver	ND	mg/L		0.0002		E200.8	09/11/14 08:39 / dck
Sodium	2940	mg/L		1		E200.7	09/10/14 14:04 / sld
Uranium	1.08	mg/L		0.0002		E200.8	09/11/14 08:39 / dck
Vanadium	ND	mg/L		0.1		E200.8	09/11/14 08:39 / dck
Zinc	0.014	mg/L		0.008		E200.8	09/11/14 08:39 / dck

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: R100372	
Lab ID: MB		Method Blank				Run: PHSC_101-H_140909A			09/09/14 12:43	
Alkalinity, Total as CaCO3		ND	mg/L	2						
Lab ID: LCS		Laboratory Control Sample				Run: PHSC_101-H_140909A			09/09/14 12:49	
Alkalinity, Total as CaCO3		600	mg/L	4.0	99	90	110			
Lab ID: H14090136-002ADUP	2	Sample Duplicate				Run: PHSC_101-H_140909A			09/09/14 13:09	
Alkalinity, Total as CaCO3		120	mg/L	4.0				0.3	10	
Bicarbonate as HCO3		140	mg/L	4.0				0.3	10	
Lab ID: H14090136-004AMS		Sample Matrix Spike				Run: PHSC_101-H_140909A			09/09/14 13:27	
Alkalinity, Total as CaCO3		670	mg/L	4.0	90	80	120			
Lab ID: H14090136-025ADUP	2	Sample Duplicate				Run: PHSC_101-H_140909A			09/09/14 15:47	
Alkalinity, Total as CaCO3		180	mg/L	4.0				1.3	10	
Bicarbonate as HCO3		220	mg/L	4.0				1.3	10	
Lab ID: MB		Method Blank				Run: PHSC_101-H_140909A			09/09/14 15:55	
Alkalinity, Total as CaCO3		ND	mg/L	2						
Lab ID: LCS		Laboratory Control Sample				Run: PHSC_101-H_140909A			09/09/14 16:01	
Alkalinity, Total as CaCO3		600	mg/L	4.0	101	90	110			
Lab ID: H14090136-026ADUP	2	Sample Duplicate				Run: PHSC_101-H_140909A			09/09/14 16:20	
Alkalinity, Total as CaCO3		5.6	mg/L	4.0				0.9	10	
Bicarbonate as HCO3		6.2	mg/L	4.0				1.0	10	
Lab ID: H14090136-027AMS		Sample Matrix Spike				Run: PHSC_101-H_140909A			09/09/14 16:31	
Alkalinity, Total as CaCO3		630	mg/L	4.0	99	80	120			
Lab ID: H14090136-043ADUP	2	Sample Duplicate				Run: PHSC_101-H_140909A			09/09/14 19:29	
Alkalinity, Total as CaCO3		620	mg/L	4.0				4.9	10	
Bicarbonate as HCO3		760	mg/L	4.0				4.9	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14
Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B										Batch: R100434
Lab ID: MB		Method Blank				Run: PHSC_101-H_140911A				09/11/14 16:17
Alkalinity, Total as CaCO3		ND	mg/L	2						
Lab ID: LCS		Laboratory Control Sample				Run: PHSC_101-H_140911A				09/11/14 16:23
Alkalinity, Total as CaCO3		590	mg/L	4.0	98	90	110			
Lab ID: H14090118-001ADUP	2	Sample Duplicate				Run: PHSC_101-H_140911A				09/11/14 16:42
Alkalinity, Total as CaCO3		230	mg/L	4.0				1.4	10	
Bicarbonate as HCO3		280	mg/L	4.0				1.4	10	
Lab ID: H14090118-002AMS		Sample Matrix Spike				Run: PHSC_101-H_140911A				09/11/14 16:55
Alkalinity, Total as CaCO3		610	mg/L	4.0	84	80	120			
Lab ID: H14090187-004ADUP	2	Sample Duplicate				Run: PHSC_101-H_140911A				09/11/14 20:18
Alkalinity, Total as CaCO3		140	mg/L	4.0				1.5	10	
Bicarbonate as HCO3		170	mg/L	4.0				1.5	10	
Method: A2320 B										Batch: R100537
Lab ID: MB		Method Blank				Run: PHSC_101-H_140915A				09/15/14 17:02
Alkalinity, Total as CaCO3		2	mg/L	2						
Lab ID: LCS		Laboratory Control Sample				Run: PHSC_101-H_140915A				09/15/14 17:08
Alkalinity, Total as CaCO3		590	mg/L	4.0	99	90	110			
Lab ID: H14070369-003ADUP	2	Sample Duplicate				Run: PHSC_101-H_140915A				09/15/14 17:26
Alkalinity, Total as CaCO3		99	mg/L	4.0				1.7	10	
Bicarbonate as HCO3		120	mg/L	4.0				1.7	10	
Lab ID: H14090233-001AMS		Sample Matrix Spike				Run: PHSC_101-H_140915A				09/15/14 18:30
Alkalinity, Total as CaCO3		670	mg/L	4.0	94	80	120			
Lab ID: H14090234-014ADUP	2	Sample Duplicate				Run: PHSC_101-H_140915A				09/15/14 20:12
Alkalinity, Total as CaCO3		100	mg/L	4.0				1.4	10	
Bicarbonate as HCO3		110	mg/L	4.0				1.7	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B										Batch: R100651
Lab ID: MB		Method Blank				Run: PHSC_101-H_140918A			09/18/14 10:02	
Alkalinity, Total as CaCO3		ND	mg/L	2						
Lab ID: LCS		Laboratory Control Sample				Run: PHSC_101-H_140918A			09/18/14 10:06	
Alkalinity, Total as CaCO3		590	mg/L	4.0	99	90	110			
Lab ID: H14090175-007ADUP	2	Sample Duplicate				Run: PHSC_101-H_140918A			09/18/14 10:26	
Alkalinity, Total as CaCO3		110	mg/L	4.0				1.0	10	
Bicarbonate as HCO3		130	mg/L	4.0				1.0	10	
Lab ID: H14090280-001AMS		Sample Matrix Spike				Run: PHSC_101-H_140918A			09/18/14 10:40	
Alkalinity, Total as CaCO3		690	mg/L	4.0	97	80	120			
Lab ID: H14090292-003HDUP	2	Sample Duplicate				Run: PHSC_101-H_140918A			09/18/14 12:35	
Alkalinity, Total as CaCO3		420	mg/L	4.0				0.6	10	
Bicarbonate as HCO3		510	mg/L	4.0				0.6	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP2-HE_140910B	
Lab ID: ICV	9	Initial Calibration Verification Standard							09/10/14 09:19	
Aluminum		4.01	mg/L	0.10	100	95	105			
Boron		0.780	mg/L	0.10	97	95	105			
Calcium		39.8	mg/L	1.0	99	95	105			
Iron		3.97	mg/L	0.020	99	95	105			
Magnesium		39.5	mg/L	1.0	99	95	105			
Manganese		3.94	mg/L	0.010	99	95	105			
Potassium		40.0	mg/L	1.0	100	95	105			
Sodium		40.0	mg/L	1.0	100	95	105			
Zinc		0.778	mg/L	0.010	97	95	105			
Lab ID: CCV-1	9	Continuing Calibration Verification Standard							09/10/14 09:22	
Aluminum		2.52	mg/L	0.10	101	95	105			
Boron		2.53	mg/L	0.10	101	95	105			
Calcium		25.2	mg/L	1.0	101	95	105			
Iron		2.50	mg/L	0.020	100	95	105			
Magnesium		25.0	mg/L	1.0	100	95	105			
Manganese		2.46	mg/L	0.010	98	95	105			
Potassium		25.0	mg/L	1.0	100	95	105			
Sodium		25.1	mg/L	1.0	100	95	105			
Zinc		2.51	mg/L	0.010	100	95	105			
Lab ID: ICSA	9	Interference Check Sample A							09/10/14 09:34	
Aluminum		521	mg/L	0.10	104	80	120			
Boron		0.00144	mg/L	0.10		0	0			
Calcium		468	mg/L	1.0	94	80	120			
Iron		187	mg/L	0.020	93	80	120			
Magnesium		501	mg/L	1.0	100	80	120			
Manganese		-0.000290	mg/L	0.010		0	0			
Potassium		-0.202	mg/L	1.0		0	0			
Sodium		0.0134	mg/L	1.0		0	0			
Zinc		0.00267	mg/L	0.010		0	0			
Lab ID: ICSAB	9	Interference Check Sample AB							09/10/14 09:38	
Aluminum		510	mg/L	0.10	102	80	120			
Boron		0.997	mg/L	0.10	100	80	120			
Calcium		465	mg/L	1.0	93	80	120			
Iron		184	mg/L	0.020	92	80	120			
Magnesium		493	mg/L	1.0	99	80	120			
Manganese		0.469	mg/L	0.010	94	80	120			
Potassium		20.0	mg/L	1.0	100	80	120			
Sodium		20.2	mg/L	1.0	101	80	120			
Zinc		0.988	mg/L	0.010	99	80	120			
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 10:08	
Aluminum		2.55	mg/L	0.10	102	90	110			

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP2-HE_140910B	
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 10:08	
Boron		2.45	mg/L	0.10	98	90	110			
Calcium		24.9	mg/L	1.0	99	90	110			
Iron		2.49	mg/L	0.020	100	90	110			
Magnesium		24.6	mg/L	1.0	98	90	110			
Manganese		2.45	mg/L	0.010	98	90	110			
Potassium		24.9	mg/L	1.0	100	90	110			
Sodium		25.1	mg/L	1.0	100	90	110			
Zinc		2.43	mg/L	0.010	97	90	110			
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 10:53	
Aluminum		2.52	mg/L	0.10	101	90	110			
Boron		2.43	mg/L	0.10	97	90	110			
Calcium		25.0	mg/L	1.0	100	90	110			
Iron		2.49	mg/L	0.020	100	90	110			
Magnesium		25.0	mg/L	1.0	100	90	110			
Manganese		2.45	mg/L	0.010	98	90	110			
Potassium		24.8	mg/L	1.0	99	90	110			
Sodium		25.0	mg/L	1.0	100	90	110			
Zinc		2.45	mg/L	0.010	98	90	110			
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 11:38	
Aluminum		2.52	mg/L	0.10	101	90	110			
Boron		2.50	mg/L	0.10	100	90	110			
Calcium		25.0	mg/L	1.0	100	90	110			
Iron		2.49	mg/L	0.020	100	90	110			
Magnesium		25.1	mg/L	1.0	100	90	110			
Manganese		2.45	mg/L	0.010	98	90	110			
Potassium		24.7	mg/L	1.0	99	90	110			
Sodium		25.0	mg/L	1.0	100	90	110			
Zinc		2.51	mg/L	0.010	100	90	110			
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 12:23	
Aluminum		2.51	mg/L	0.10	100	90	110			
Boron		2.47	mg/L	0.10	99	90	110			
Calcium		25.0	mg/L	1.0	100	90	110			
Iron		2.50	mg/L	0.020	100	90	110			
Magnesium		25.3	mg/L	1.0	101	90	110			
Manganese		2.46	mg/L	0.010	99	90	110			
Potassium		25.3	mg/L	1.0	101	90	110			
Sodium		25.5	mg/L	1.0	102	90	110			
Zinc		2.49	mg/L	0.010	100	90	110			
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 13:34	
Aluminum		2.56	mg/L	0.10	102	90	110			
Boron		2.60	mg/L	0.10	104	90	110			

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP2-HE_140910B	
Lab ID: CCV	9	Continuing Calibration Verification Standard							09/10/14 13:34	
Calcium		25.6	mg/L	1.0	102	90	110			
Iron		2.54	mg/L	0.020	102	90	110			
Magnesium		25.5	mg/L	1.0	102	90	110			
Manganese		2.48	mg/L	0.010	99	90	110			
Potassium		25.1	mg/L	1.0	100	90	110			
Sodium		25.1	mg/L	1.0	100	90	110			
Zinc		2.60	mg/L	0.010	104	90	110			
Method: E200.7										Batch: R100472
Lab ID: ICB	9	Method Blank				Run: ICP2-HE_140910B			09/10/14 09:45	
Aluminum		0.004	mg/L	0.002						
Boron		ND	mg/L	0.002						
Calcium		0.05	mg/L	0.03						
Iron		0.005	mg/L	0.003						
Magnesium		ND	mg/L	0.02						
Manganese		0.0006	mg/L	0.0004						
Potassium		ND	mg/L	0.04						
Sodium		ND	mg/L	0.02						
Zinc		0.002	mg/L	0.0008						
Lab ID: LFB	9	Laboratory Fortified Blank				Run: ICP2-HE_140910B			09/10/14 09:49	
Aluminum		4.81	mg/L	0.10	96	85	115			
Boron		0.929	mg/L	0.10	93	85	115			
Calcium		47.4	mg/L	1.0	95	85	115			
Iron		4.74	mg/L	0.020	95	85	115			
Magnesium		47.3	mg/L	1.0	95	85	115			
Manganese		4.72	mg/L	0.010	94	85	115			
Potassium		47.8	mg/L	1.0	96	85	115			
Sodium		47.8	mg/L	1.0	96	85	115			
Zinc		0.930	mg/L	0.010	93	85	115			
Lab ID: H14090136-001BMS2	9	Sample Matrix Spike				Run: ICP2-HE_140910B			09/10/14 10:04	
Aluminum		5.07	mg/L	0.030	101	70	130			
Boron		1.07	mg/L	0.050	96	70	130			
Calcium		151	mg/L	1.0	96	70	130			
Iron		4.92	mg/L	0.020	98	70	130			
Magnesium		83.5	mg/L	1.0	98	70	130			
Manganese		4.89	mg/L	0.0010	98	70	130			
Potassium		63.3	mg/L	1.0	101	70	130			
Sodium		198	mg/L	1.0	101	70	130			
Zinc		0.980	mg/L	0.010	97	70	130			
Lab ID: H14090136-001BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 10:15	
Aluminum		5.07	mg/L	0.030	101	70	130	0.0	20	
Boron		1.07	mg/L	0.050	97	70	130	0.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: R100472	
Lab ID: H14090136-001BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 10:15	
Calcium		151	mg/L	1.0	96	70	130	0.0	20	
Iron		4.93	mg/L	0.020	98	70	130	0.1	20	
Magnesium		83.8	mg/L	1.0	99	70	130	0.4	20	
Manganese		4.89	mg/L	0.0010	98	70	130	0.0	20	
Potassium		63.8	mg/L	1.0	102	70	130	0.7	20	
Sodium		202	mg/L	1.0	109	70	130	1.9	20	
Zinc		0.993	mg/L	0.010	99	70	130	1.3	20	
Lab ID: H14090136-009BMS2	9	Sample Matrix Spike				Run: ICP2-HE_140910B			09/10/14 11:01	
Aluminum		5.05	mg/L	0.030	101	70	130			
Boron		1.02	mg/L	0.050	98	70	130			
Calcium		106	mg/L	1.0	99	70	130			
Iron		4.96	mg/L	0.020	99	70	130			
Magnesium		64.5	mg/L	1.0	101	70	130			
Manganese		4.94	mg/L	0.0010	99	70	130			
Potassium		53.9	mg/L	1.0	101	70	130			
Sodium		73.5	mg/L	1.0	101	70	130			
Zinc		0.996	mg/L	0.010	99	70	130			
Lab ID: H14090136-009BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 11:04	
Aluminum		5.05	mg/L	0.030	101	70	130	0.0	20	
Boron		1.01	mg/L	0.050	96	70	130	1.7	20	
Calcium		106	mg/L	1.0	99	70	130	0.4	20	
Iron		4.95	mg/L	0.020	99	70	130	0.1	20	
Magnesium		64.4	mg/L	1.0	100	70	130	0.1	20	
Manganese		4.92	mg/L	0.0010	98	70	130	0.3	20	
Potassium		53.9	mg/L	1.0	101	70	130	0.0	20	
Sodium		73.5	mg/L	1.0	101	70	130	0.0	20	
Zinc		0.980	mg/L	0.010	98	70	130	1.6	20	
Lab ID: H14090136-019BMS2	9	Sample Matrix Spike				Run: ICP2-HE_140910B			09/10/14 11:53	
Aluminum		5.23	mg/L	0.030	103	70	130			
Boron		1.07	mg/L	0.050	95	70	130			
Calcium		167	mg/L	1.0	99	70	130			
Iron		5.01	mg/L	0.020	99	70	130			
Magnesium		71.9	mg/L	1.0	99	70	130			
Manganese		4.87	mg/L	0.0010	97	70	130			
Potassium		58.3	mg/L	1.0	104	70	130			
Sodium		203	mg/L	1.0	117	70	130			
Zinc		0.979	mg/L	0.010	97	70	130			
Lab ID: H14090136-019BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 11:57	
Aluminum		5.20	mg/L	0.030	102	70	130	0.6	20	
Boron		1.08	mg/L	0.050	97	70	130	1.4	20	
Calcium		167	mg/L	1.0	99	70	130	0.0	20	

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: R100472	
Lab ID: H14090136-019BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 11:57	
Iron		5.04	mg/L	0.020	99	70	130	0.6	20	
Magnesium		72.5	mg/L	1.0	100	70	130	0.8	20	
Manganese		4.89	mg/L	0.0010	98	70	130	0.4	20	
Potassium		58.8	mg/L	1.0	105	70	130	0.7	20	
Sodium		203	mg/L	1.0	118	70	130	0.0	20	
Zinc		0.999	mg/L	0.010	99	70	130	2.0	20	
Lab ID: H14090136-030BMS2	9	Sample Matrix Spike				Run: ICP2-HE_140910B			09/10/14 12:38	
Aluminum		5.18	mg/L	0.030	104	70	130			
Boron		1.17	mg/L	0.050	98	70	130			
Calcium		223	mg/L	1.0	99	70	130			
Iron		4.97	mg/L	0.020	99	70	130			
Magnesium		80.0	mg/L	1.0	101	70	130			
Manganese		4.93	mg/L	0.0010	99	70	130			
Potassium		65.1	mg/L	1.0	102	70	130			
Sodium		146	mg/L	1.0	101	70	130			
Zinc		1.02	mg/L	0.010	100	70	130			
Lab ID: H14090136-030BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 12:41	
Aluminum		5.14	mg/L	0.030	103	70	130	0.8	20	
Boron		1.19	mg/L	0.050	101	70	130	2.2	20	
Calcium		223	mg/L	1.0	98	70	130	0.1	20	
Iron		4.92	mg/L	0.020	98	70	130	1.0	20	
Magnesium		79.7	mg/L	1.0	100	70	130	0.3	20	
Manganese		4.86	mg/L	0.0010	97	70	130	1.4	20	
Potassium		65.9	mg/L	1.0	104	70	130	1.2	20	
Sodium		148	mg/L	1.0	105	70	130	1.5	20	
Zinc		1.04	mg/L	0.010	102	70	130	2.5	20	
Lab ID: H14090136-038BMS2	9	Sample Matrix Spike				Run: ICP2-HE_140910B			09/10/14 13:45	
Aluminum		5.13	mg/L	0.030	102	70	130			
Boron		1.07	mg/L	0.050	100	70	130			
Calcium		98.6	mg/L	1.0	104	70	130			
Iron		5.01	mg/L	0.020	100	70	130			
Magnesium		60.7	mg/L	1.0	101	70	130			
Manganese		4.98	mg/L	0.0010	99	70	130			
Potassium		53.1	mg/L	1.0	100	70	130			
Sodium		119	mg/L	1.0	99	70	130			
Zinc		1.68	mg/L	0.010	106	70	130			
Lab ID: H14090136-038BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 13:49	
Aluminum		5.06	mg/L	0.030	101	70	130	1.4	20	
Boron		1.10	mg/L	0.050	103	70	130	2.8	20	
Calcium		97.8	mg/L	1.0	103	70	130	0.8	20	
Iron		4.97	mg/L	0.020	99	70	130	0.8	20	

Qualifiers:

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ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Report Date: 10/01/14
Project: Silver Bow Creek Monitoring
Work Order: H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R100472
Lab ID: H14090136-038BMSD	9	Sample Matrix Spike Duplicate				Run: ICP2-HE_140910B			09/10/14 13:49	
Magnesium		60.1	mg/L	1.0	100	70	130	1.1	20	
Manganese		4.95	mg/L	0.0010	98	70	130	0.8	20	
Potassium		53.0	mg/L	1.0	100	70	130	0.2	20	
Sodium		119	mg/L	1.0	99	70	130	0.2	20	
Zinc		1.72	mg/L	0.010	110	70	130	2.6	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140910A		
Lab ID: ICV STD	23	Initial Calibration Verification Standard							09/10/14 11:31	
Antimony		0.0586	mg/L	0.050	98	90	110			
Arsenic		0.0597	mg/L	0.0050	100	90	110			
Barium		0.0586	mg/L	0.10	98	90	110			
Beryllium		0.0296	mg/L	0.0010	99	90	110			
Boron		0.0596	mg/L	0.10	99	90	110			
Cadmium		0.0311	mg/L	0.0010	104	90	110			
Calcium		3.14	mg/L	0.50	105	90	110			
Chromium		0.0605	mg/L	0.010	101	90	110			
Cobalt		0.0592	mg/L	0.010	99	90	110			
Copper		0.0620	mg/L	0.010	103	90	110			
Iron		0.314	mg/L	0.020	105	90	110			
Lead		0.0587	mg/L	0.010	98	90	110			
Magnesium		3.22	mg/L	0.50	107	90	110			
Manganese		0.296	mg/L	0.010	99	90	110			
Molybdenum		0.0591	mg/L	0.0050	99	90	110			
Nickel		0.0617	mg/L	0.010	103	90	110			
Potassium		3.13	mg/L	0.50	104	90	110			
Selenium		0.0598	mg/L	0.0050	100	90	110			
Silver		0.0294	mg/L	0.0050	98	90	110			
Sodium		3.05	mg/L	0.50	102	90	110			
Uranium		0.0590	mg/L	0.0010	98	90	110			
Vanadium		0.0599	mg/L	0.10	100	90	110			
Zinc		0.0613	mg/L	0.010	102	90	110			
Lab ID: ICSA	23	Interference Check Sample A							09/10/14 11:35	
Antimony		0.000135	mg/L	0.050						
Arsenic		0.000135	mg/L	0.0050						
Barium		0.000178	mg/L	0.10						
Beryllium		1.60E-05	mg/L	0.0010						
Boron		0.00189	mg/L	0.10						
Cadmium		0.000515	mg/L	0.0010						
Calcium		114	mg/L	0.50	95	70	130			
Chromium		0.00104	mg/L	0.010						
Cobalt		0.000229	mg/L	0.010						
Copper		0.000310	mg/L	0.010						
Iron		94.5	mg/L	0.020	95	70	130			
Lead		0.000261	mg/L	0.010						
Magnesium		38.7	mg/L	0.50	97	70	130			
Manganese		-0.000683	mg/L	0.010						
Molybdenum		0.829	mg/L	0.0050	104	70	130			
Nickel		0.000593	mg/L	0.010						
Potassium		39.5	mg/L	0.50	99	70	130			
Selenium		0.000260	mg/L	0.0050						
Silver		0.000243	mg/L	0.0050						

Qualifiers:

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QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140910A		
Lab ID: ICSA	23	Interference Check Sample A								09/10/14 11:35
Sodium		96.0	mg/L	0.50	96	70	130			
Uranium		9.10E-05	mg/L	0.0010						
Vanadium		4.10E-05	mg/L	0.10						
Zinc		0.00160	mg/L	0.010						
Lab ID: ICSAB	23	Interference Check Sample AB								09/10/14 11:39
Antimony		0.000742	mg/L	0.050		0	0			
Arsenic		0.0107	mg/L	0.0050	107	70	130			
Barium		0.000122	mg/L	0.10		0	0			
Beryllium		1.00E-06	mg/L	0.0010		0	0			
Boron		0.00114	mg/L	0.10		0	0			
Cadmium		0.00979	mg/L	0.0010	98	70	130			
Calcium		113	mg/L	0.50	94	70	130			
Chromium		0.0207	mg/L	0.010	104	70	130			
Cobalt		0.0194	mg/L	0.010	97	70	130			
Copper		0.0200	mg/L	0.010	100	70	130			
Iron		97.2	mg/L	0.020	97	70	130			
Lead		0.000259	mg/L	0.010		0	0			
Magnesium		38.7	mg/L	0.50	97	70	130			
Manganese		0.0185	mg/L	0.010	93	70	130			
Molybdenum		0.829	mg/L	0.0050	104	70	130			
Nickel		0.0203	mg/L	0.010	102	70	130			
Potassium		39.4	mg/L	0.50	99	70	130			
Selenium		0.0121	mg/L	0.0050	121	70	130			
Silver		0.0182	mg/L	0.0050	91	70	130			
Sodium		96.8	mg/L	0.50	97	70	130			
Uranium		3.90E-05	mg/L	0.0010		0	0			
Vanadium		0.0199	mg/L	0.10	100	70	130			
Zinc		0.0111	mg/L	0.010	111	70	130			
Lab ID: ICV STD	23	Initial Calibration Verification Standard								09/10/14 22:13
Antimony		0.0597	mg/L	0.050	99	90	110			
Arsenic		0.0604	mg/L	0.0050	101	90	110			
Barium		0.0592	mg/L	0.10	99	90	110			
Beryllium		0.0299	mg/L	0.0010	100	90	110			
Boron		0.0596	mg/L	0.10	99	90	110			
Cadmium		0.0310	mg/L	0.0010	103	90	110			
Calcium		3.15	mg/L	0.50	105	90	110			
Chromium		0.0612	mg/L	0.010	102	90	110			
Cobalt		0.0591	mg/L	0.010	98	90	110			
Copper		0.0623	mg/L	0.010	104	90	110			
Iron		0.317	mg/L	0.020	106	90	110			
Lead		0.0588	mg/L	0.010	98	90	110			
Magnesium		3.21	mg/L	0.50	107	90	110			
Manganese		0.300	mg/L	0.010	100	90	110			

Qualifiers:

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QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140910A		
Lab ID: ICV STD	23	Initial Calibration Verification Standard								09/10/14 22:13
Molybdenum		0.0600	mg/L	0.0050	100	90	110			
Nickel		0.0620	mg/L	0.010	103	90	110			
Potassium		3.15	mg/L	0.50	105	90	110			
Selenium		0.0605	mg/L	0.0050	101	90	110			
Silver		0.0298	mg/L	0.0050	99	90	110			
Sodium		3.06	mg/L	0.50	102	90	110			
Uranium		0.0591	mg/L	0.0010	98	90	110			
Vanadium		0.0600	mg/L	0.10	100	90	110			
Zinc		0.0610	mg/L	0.010	102	90	110			
Lab ID: ICSA	23	Interference Check Sample A								09/10/14 22:17
Antimony		9.20E-05	mg/L	0.050						
Arsenic		0.000140	mg/L	0.0050						
Barium		8.50E-05	mg/L	0.10						
Beryllium		2.80E-05	mg/L	0.0010						
Boron		0.000757	mg/L	0.10						
Cadmium		0.000523	mg/L	0.0010						
Calcium		113	mg/L	0.50	94	70	130			
Chromium		0.00103	mg/L	0.010						
Cobalt		0.000244	mg/L	0.010						
Copper		0.000286	mg/L	0.010						
Iron		95.8	mg/L	0.020	96	70	130			
Lead		0.000239	mg/L	0.010						
Magnesium		38.6	mg/L	0.50	96	70	130			
Manganese		-0.000111	mg/L	0.010						
Molybdenum		0.805	mg/L	0.0050	101	70	130			
Nickel		0.000582	mg/L	0.010						
Potassium		39.1	mg/L	0.50	98	70	130			
Selenium		0.000244	mg/L	0.0050						
Silver		0.000126	mg/L	0.0050						
Sodium		96.4	mg/L	0.50	96	70	130			
Uranium		5.50E-05	mg/L	0.0010						
Vanadium		8.90E-05	mg/L	0.10						
Zinc		-1.10E-05	mg/L	0.010						
Lab ID: ICSAB	23	Interference Check Sample AB								09/10/14 22:21
Antimony		0.000592	mg/L	0.050		0	0			
Arsenic		0.0103	mg/L	0.0050	103	70	130			
Barium		0.000102	mg/L	0.10		0	0			
Beryllium		1.40E-05	mg/L	0.0010		0	0			
Boron		0.000197	mg/L	0.10		0	0			
Cadmium		0.00962	mg/L	0.0010	96	70	130			
Calcium		111	mg/L	0.50	93	70	130			
Chromium		0.0204	mg/L	0.010	102	70	130			
Cobalt		0.0189	mg/L	0.010	94	70	130			

Qualifiers:

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QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140910A	
Lab ID: ICSAB	23	Interference Check Sample AB							09/10/14 22:21	
Copper		0.0195	mg/L	0.010	97	70	130			
Iron		94.4	mg/L	0.020	94	70	130			
Lead		0.000248	mg/L	0.010		0	0			
Magnesium		37.9	mg/L	0.50	95	70	130			
Manganese		0.0185	mg/L	0.010	93	70	130			
Molybdenum		0.811	mg/L	0.0050	101	70	130			
Nickel		0.0199	mg/L	0.010	100	70	130			
Potassium		38.4	mg/L	0.50	96	70	130			
Selenium		0.0114	mg/L	0.0050	114	70	130			
Silver		0.0175	mg/L	0.0050	88	70	130			
Sodium		94.5	mg/L	0.50	95	70	130			
Uranium		2.00E-05	mg/L	0.0010		0	0			
Vanadium		0.0197	mg/L	0.10	98	70	130			
Zinc		0.00963	mg/L	0.010	96	70	130			
Method: E200.8									Batch: R100417	
Lab ID: ICB	23	Method Blank				Run: ICPMS204-B_140910A			09/10/14 12:14	
Antimony		ND	mg/L	1E-05						
Arsenic		ND	mg/L	3E-05						
Barium		ND	mg/L	3E-05						
Beryllium		ND	mg/L	2E-05						
Boron		ND	mg/L	0.0002						
Cadmium		ND	mg/L	6E-06						
Calcium		ND	mg/L	0.005						
Chromium		ND	mg/L	3E-05						
Cobalt		ND	mg/L	2E-05						
Copper		ND	mg/L	3E-05						
Iron		0.002	mg/L	0.0002						
Lead		ND	mg/L	8E-06						
Magnesium		0.001	mg/L	0.0006						
Manganese		ND	mg/L	2E-05						
Molybdenum		4E-05	mg/L	3E-05						
Nickel		ND	mg/L	6E-05						
Potassium		ND	mg/L	0.05						
Selenium		ND	mg/L	7E-05						
Silver		ND	mg/L	3E-05						
Sodium		ND	mg/L	0.008						
Uranium		ND	mg/L	6E-06						
Vanadium		ND	mg/L	3E-05						
Zinc		ND	mg/L	0.0003						
Lab ID: LFB	23	Laboratory Fortified Blank				Run: ICPMS204-B_140910A			09/10/14 12:18	
Antimony		0.0474	mg/L	0.050	95	85	115			
Arsenic		0.0490	mg/L	0.0050	98	85	115			

Qualifiers:

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ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R100417
Lab ID: LFB	23	Laboratory Fortified Blank				Run: ICPMS204-B_140910A				09/10/14 12:18
Barium		0.0483	mg/L	0.10	97	85	115			
Beryllium		0.0470	mg/L	0.0010	94	85	115			
Boron		0.0468	mg/L	0.10	94	85	115			
Cadmium		0.0498	mg/L	0.0010	100	85	115			
Calcium		1.06	mg/L	0.50	106	85	115			
Chromium		0.0493	mg/L	0.010	99	85	115			
Cobalt		0.0499	mg/L	0.010	100	85	115			
Copper		0.0500	mg/L	0.010	100	85	115			
Iron		0.156	mg/L	0.020	103	85	115			
Lead		0.0485	mg/L	0.010	97	85	115			
Magnesium		0.964	mg/L	0.50	96	85	115			
Manganese		0.0497	mg/L	0.010	99	85	115			
Molybdenum		0.0478	mg/L	0.0050	95	85	115			
Nickel		0.0499	mg/L	0.010	100	85	115			
Potassium		0.961	mg/L	0.50	96	85	115			
Selenium		0.0511	mg/L	0.0050	102	85	115			
Silver		0.0199	mg/L	0.0050	100	85	115			
Sodium		0.983	mg/L	0.50	98	85	115			
Uranium		0.0477	mg/L	0.0010	95	85	115			
Vanadium		0.0488	mg/L	0.10	98	85	115			
Zinc		0.0509	mg/L	0.010	102	85	115			
Lab ID: H14090064-002BMS3	23	Sample Matrix Spike				Run: ICPMS204-B_140910A				09/10/14 15:10
Antimony		0.489	mg/L	0.0010	98	70	130			
Arsenic		0.484	mg/L	0.0010	97	70	130			
Barium		0.778	mg/L	0.050	99	70	130			
Beryllium		0.233	mg/L	0.0010	93	70	130			
Boron		0.491	mg/L	0.050	95	70	130			
Cadmium		0.246	mg/L	0.0010	98	70	130			
Calcium		30.7	mg/L	1.0	98	70	130			
Chromium		0.480	mg/L	0.0050	96	70	130			
Cobalt		0.462	mg/L	0.0050	92	70	130			
Copper		0.486	mg/L	0.0050	97	70	130			
Iron		3.20	mg/L	0.020	97	70	130			
Lead		0.487	mg/L	0.0010	97	70	130			
Magnesium		25.5	mg/L	1.0	95	70	130			
Manganese		2.34	mg/L	0.0010	93	70	130			
Molybdenum		0.508	mg/L	0.0010	101	70	130			
Nickel		0.478	mg/L	0.0050	95	70	130			
Potassium		24.8	mg/L	1.0	95	70	130			
Selenium		0.487	mg/L	0.0010	97	70	130			
Silver		0.0439	mg/L	0.0010	88	70	130			
Sodium		25.4	mg/L	1.0	94	70	130			
Uranium		0.498	mg/L	0.00030	100	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100417	
Lab ID: H14090064-002BMS3	23	Sample Matrix Spike				Run: ICPMS204-B_140910A			09/10/14 15:10	
Vanadium		0.482	mg/L	0.010	96	70	130			
Zinc		0.472	mg/L	0.010	94	70	130			
Lab ID: H14090064-002BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/10/14 15:14	
Antimony		0.487	mg/L	0.0010	97	70	130	0.4	20	
Arsenic		0.479	mg/L	0.0010	96	70	130	1.1	20	
Barium		0.771	mg/L	0.050	98	70	130	0.8	20	
Beryllium		0.230	mg/L	0.0010	92	70	130	1.6	20	
Boron		0.486	mg/L	0.050	94	70	130	1.0	20	
Cadmium		0.242	mg/L	0.0010	97	70	130	1.5	20	
Calcium		30.9	mg/L	1.0	99	70	130	0.9	20	
Chromium		0.486	mg/L	0.0050	97	70	130	1.3	20	
Cobalt		0.457	mg/L	0.0050	91	70	130	1.1	20	
Copper		0.489	mg/L	0.0050	97	70	130	0.5	20	
Iron		3.17	mg/L	0.020	96	70	130	0.8	20	
Lead		0.483	mg/L	0.0010	96	70	130	0.9	20	
Magnesium		25.5	mg/L	1.0	95	70	130	0.0	20	
Manganese		2.32	mg/L	0.0010	92	70	130	1.0	20	
Molybdenum		0.511	mg/L	0.0010	102	70	130	0.7	20	
Nickel		0.481	mg/L	0.0050	96	70	130	0.8	20	
Potassium		25.1	mg/L	1.0	96	70	130	1.2	20	
Selenium		0.485	mg/L	0.0010	97	70	130	0.3	20	
Silver		0.0439	mg/L	0.0010	88	70	130	0.0	20	
Sodium		25.3	mg/L	1.0	93	70	130	0.4	20	
Uranium		0.486	mg/L	0.00030	97	70	130	2.5	20	
Vanadium		0.487	mg/L	0.010	97	70	130	1.1	20	
Zinc		0.472	mg/L	0.010	94	70	130	0.1	20	
Lab ID: LFB	23	Laboratory Fortified Blank				Run: ICPMS204-B_140910A			09/10/14 22:44	
Antimony		0.0480	mg/L	0.050	96	85	115			
Arsenic		0.0499	mg/L	0.0050	100	85	115			
Barium		0.0491	mg/L	0.10	98	85	115			
Beryllium		0.0484	mg/L	0.0010	97	85	115			
Boron		0.0478	mg/L	0.10	96	85	115			
Cadmium		0.0508	mg/L	0.0010	102	85	115			
Calcium		1.07	mg/L	0.50	107	85	115			
Chromium		0.0503	mg/L	0.010	101	85	115			
Cobalt		0.0495	mg/L	0.010	99	85	115			
Copper		0.0512	mg/L	0.010	102	85	115			
Iron		0.165	mg/L	0.020	109	85	115			
Lead		0.0490	mg/L	0.010	98	85	115			
Magnesium		0.976	mg/L	0.50	97	85	115			
Manganese		0.0494	mg/L	0.010	99	85	115			
Molybdenum		0.0491	mg/L	0.0050	98	85	115			
Nickel		0.0513	mg/L	0.010	103	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100417	
Lab ID: LFB	23	Laboratory Fortified Blank				Run: ICPMS204-B_140910A			09/10/14 22:44	
Potassium		0.990	mg/L	0.50	99	85	115			
Selenium		0.0511	mg/L	0.0050	102	85	115			
Silver		0.0202	mg/L	0.0050	101	85	115			
Sodium		1.02	mg/L	0.50	102	85	115			
Uranium		0.0480	mg/L	0.0010	96	85	115			
Vanadium		0.0491	mg/L	0.10	98	85	115			
Zinc		0.0525	mg/L	0.010	105	85	115			
Lab ID: H14090101-002BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140910A			09/11/14 04:05	
Antimony		0.250	mg/L	0.0010	100	70	130			
Arsenic		0.254	mg/L	0.0010	101	70	130			
Barium		0.251	mg/L	0.050	98	70	130			
Beryllium		0.232	mg/L	0.0010	93	70	130			
Boron		1.55	mg/L	0.050		70	130			A
Cadmium		0.227	mg/L	0.0010	91	70	130			
Calcium		433	mg/L	1.0		70	130			A
Chromium		0.242	mg/L	0.0050	97	70	130			
Cobalt		0.238	mg/L	0.0050	94	70	130			
Copper		0.238	mg/L	0.0050	95	70	130			
Iron		1.40	mg/L	0.020	91	70	130			
Lead		0.243	mg/L	0.0010	97	70	130			
Magnesium		130	mg/L	1.0		70	130			A
Manganese		5.00	mg/L	0.0010		70	130			A
Molybdenum		0.256	mg/L	0.0010	101	70	130			
Nickel		0.241	mg/L	0.0050	96	70	130			
Potassium		21.6	mg/L	1.0	85	70	130			
Selenium		0.239	mg/L	0.0010	95	70	130			
Silver		0.0934	mg/L	0.0010	93	70	130			
Sodium		4370	mg/L	1.0		70	130			A
Uranium		0.259	mg/L	0.00030	102	70	130			
Vanadium		0.250	mg/L	0.010	100	70	130			
Zinc		0.244	mg/L	0.010	98	70	130			
Lab ID: H14090101-002BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 04:09	
Antimony		0.253	mg/L	0.0010	101	70	130	1.3	20	
Arsenic		0.257	mg/L	0.0010	102	70	130	1.2	20	
Barium		0.254	mg/L	0.050	99	70	130	1.1	20	
Beryllium		0.234	mg/L	0.0010	94	70	130	0.8	20	
Boron		1.57	mg/L	0.050		70	130	1.4	20	A
Cadmium		0.232	mg/L	0.0010	93	70	130	2.2	20	
Calcium		437	mg/L	1.0		70	130	0.8	20	A
Chromium		0.245	mg/L	0.0050	98	70	130	1.1	20	
Cobalt		0.242	mg/L	0.0050	96	70	130	1.5	20	
Copper		0.242	mg/L	0.0050	97	70	130	1.3	20	
Iron		1.43	mg/L	0.020	95	70	130	1.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100417	
Lab ID: H14090101-002BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 04:09	
Lead		0.246	mg/L	0.0010	98	70	130	1.2	20	
Magnesium		130	mg/L	1.0		70	130	0.0	20	A
Manganese		5.01	mg/L	0.0010		70	130	0.1	20	A
Molybdenum		0.260	mg/L	0.0010	103	70	130	1.5	20	
Nickel		0.241	mg/L	0.0050	96	70	130	0.2	20	
Potassium		21.8	mg/L	1.0	89	70	130	0.9	20	
Selenium		0.246	mg/L	0.0010	98	70	130	3.1	20	
Silver		0.0925	mg/L	0.0010	93	70	130	1.0	20	
Sodium		4390	mg/L	1.0		70	130	0.4	20	A
Uranium		0.257	mg/L	0.00030	102	70	130	0.6	20	
Vanadium		0.254	mg/L	0.010	101	70	130	1.3	20	
Zinc		0.246	mg/L	0.010	98	70	130	0.8	20	
Lab ID: H14090136-010BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140910A			09/11/14 05:29	
Antimony		0.0484	mg/L	0.0010	96	70	130			
Arsenic		0.0520	mg/L	0.0010	102	70	130			
Barium		0.103	mg/L	0.050	95	70	130			
Beryllium		0.0476	mg/L	0.0010	95	70	130			
Boron		0.0930	mg/L	0.050	92	70	130			
Cadmium		0.0471	mg/L	0.0010	94	70	130			
Calcium		84.1	mg/L	1.0		70	130			A
Chromium		0.0504	mg/L	0.0050	101	70	130			
Cobalt		0.0479	mg/L	0.0050	94	70	130			
Copper		0.0511	mg/L	0.0050	101	70	130			
Iron		0.159	mg/L	0.020	101	70	130			
Lead		0.0483	mg/L	0.0010	97	70	130			
Magnesium		16.6	mg/L	1.0		70	130			A
Manganese		0.108	mg/L	0.0010	96	70	130			
Molybdenum		0.0599	mg/L	0.0010	100	70	130			
Nickel		0.0537	mg/L	0.0050	100	70	130			
Potassium		4.93	mg/L	1.0	106	70	130			
Selenium		0.0526	mg/L	0.0010	100	70	130			
Silver		0.0191	mg/L	0.0010	95	70	130			
Sodium		32.9	mg/L	1.0		70	130			A
Uranium		0.107	mg/L	0.00030	98	70	130			
Vanadium		0.0510	mg/L	0.010	101	70	130			
Zinc		0.0717	mg/L	0.010	104	70	130			
Lab ID: H14090136-010BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 05:33	
Antimony		0.0501	mg/L	0.0010	99	70	130	3.5	20	
Arsenic		0.0507	mg/L	0.0010	100	70	130	2.4	20	
Barium		0.106	mg/L	0.050	102	70	130	3.4	20	
Beryllium		0.0484	mg/L	0.0010	97	70	130	1.8	20	
Boron		0.0951	mg/L	0.050	96	70	130	2.2	20	
Cadmium		0.0477	mg/L	0.0010	95	70	130	1.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100417	
Lab ID: H14090136-010BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 05:33	
Calcium		84.7	mg/L	1.0		70	130	0.6	20	A
Chromium		0.0495	mg/L	0.0050	99	70	130	1.7	20	
Cobalt		0.0481	mg/L	0.0050	94	70	130	0.4	20	
Copper		0.0497	mg/L	0.0050	98	70	130	2.9	20	
Iron		0.157	mg/L	0.020	99	70	130	1.6	20	
Lead		0.0491	mg/L	0.0010	98	70	130	1.5	20	
Magnesium		16.8	mg/L	1.0		70	130	0.7	20	A
Manganese		0.109	mg/L	0.0010	99	70	130	1.6	20	
Molybdenum		0.0612	mg/L	0.0010	103	70	130	2.1	20	
Nickel		0.0528	mg/L	0.0050	98	70	130	1.7	20	
Potassium		5.08	mg/L	1.0	121	70	130	3.0	20	
Selenium		0.0517	mg/L	0.0010	99	70	130	1.7	20	
Silver		0.0194	mg/L	0.0010	97	70	130	1.7	20	
Sodium		33.4	mg/L	1.0		70	130	1.3	20	A
Uranium		0.109	mg/L	0.00030	101	70	130	1.8	20	
Vanadium		0.0501	mg/L	0.010	99	70	130	1.7	20	
Zinc		0.0691	mg/L	0.010	99	70	130	3.7	20	
Lab ID: H14090136-020BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140910A			09/11/14 06:40	
Antimony		0.0498	mg/L	0.0010	99	70	130			
Arsenic		0.0544	mg/L	0.0010	100	70	130			
Barium		0.0835	mg/L	0.050	101	70	130			
Beryllium		0.0478	mg/L	0.0010	96	70	130			
Boron		0.148	mg/L	0.050	94	70	130			
Cadmium		0.0502	mg/L	0.0010	95	70	130			
Calcium		82.2	mg/L	1.0		70	130			A
Chromium		0.0490	mg/L	0.0050	98	70	130			
Cobalt		0.0511	mg/L	0.0050	97	70	130			
Copper		0.266	mg/L	0.0050		70	130			A
Iron		0.349	mg/L	0.020	147	70	130			S
Lead		0.0504	mg/L	0.0010	98	70	130			
Magnesium		14.1	mg/L	1.0		70	130			A
Manganese		3.30	mg/L	0.0010		70	130			A
Molybdenum		0.0745	mg/L	0.0010	105	70	130			
Nickel		0.0506	mg/L	0.0050	98	70	130			
Potassium		8.82	mg/L	1.0		70	130			A
Selenium		0.0497	mg/L	0.0010	99	70	130			
Silver		0.0184	mg/L	0.0010	92	70	130			
Sodium		92.7	mg/L	1.0		70	130			A
Uranium		0.0543	mg/L	0.00030	103	70	130			
Vanadium		0.0504	mg/L	0.010	99	70	130			
Zinc		1.75	mg/L	0.010		70	130			A
Lab ID: H14090136-020BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 06:44	
Antimony		0.0474	mg/L	0.0010	95	70	130	4.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100417	
Lab ID: H14090136-020BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 06:44	
Arsenic		0.0550	mg/L	0.0010	102	70	130	1.3	20	
Barium		0.0798	mg/L	0.050	94	70	130	4.5	20	
Beryllium		0.0465	mg/L	0.0010	93	70	130	2.8	20	
Boron		0.146	mg/L	0.050	89	70	130	1.8	20	
Cadmium		0.0474	mg/L	0.0010	89	70	130	5.8	20	
Calcium		84.9	mg/L	1.0		70	130	3.2	20	A
Chromium		0.0498	mg/L	0.0050	99	70	130	1.6	20	
Cobalt		0.0483	mg/L	0.0050	92	70	130	5.6	20	
Copper		0.270	mg/L	0.0050		70	130	1.8	20	A
Iron		0.415	mg/L	0.020	192	70	130	17	20	S
Lead		0.0492	mg/L	0.0010	96	70	130	2.3	20	
Magnesium		14.4	mg/L	1.0		70	130	1.8	20	A
Manganese		3.14	mg/L	0.0010		70	130	4.8	20	A
Molybdenum		0.0718	mg/L	0.0010	100	70	130	3.7	20	
Nickel		0.0509	mg/L	0.0050	99	70	130	0.6	20	
Potassium		9.10	mg/L	1.0		70	130	3.1	20	A
Selenium		0.0490	mg/L	0.0010	98	70	130	1.4	20	
Silver		0.0168	mg/L	0.0010	84	70	130	9.3	20	
Sodium		95.0	mg/L	1.0		70	130	2.4	20	A
Uranium		0.0525	mg/L	0.00030	99	70	130	3.4	20	
Vanadium		0.0512	mg/L	0.010	100	70	130	1.6	20	
Zinc		1.80	mg/L	0.010		70	130	2.9	20	A
Lab ID: H14090136-035BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140910A			09/11/14 07:50	
Antimony		0.0485	mg/L	0.0010	97	70	130			
Arsenic		0.0629	mg/L	0.0010	103	70	130			
Barium		0.0730	mg/L	0.050	97	70	130			
Beryllium		0.0475	mg/L	0.0010	95	70	130			
Boron		0.156	mg/L	0.050	96	70	130			
Cadmium		0.0480	mg/L	0.0010	94	70	130			
Calcium		110	mg/L	1.0		70	130			A
Chromium		0.0503	mg/L	0.0050	100	70	130			
Cobalt		0.0479	mg/L	0.0050	94	70	130			
Copper		0.130	mg/L	0.0050	102	70	130			
Iron		0.356	mg/L	0.020	107	70	130			
Lead		0.0484	mg/L	0.0010	96	70	130			
Magnesium		21.3	mg/L	1.0		70	130			A
Manganese		0.648	mg/L	0.0010		70	130			A
Molybdenum		0.0538	mg/L	0.0010	102	70	130			
Nickel		0.0505	mg/L	0.0050	100	70	130			
Potassium		8.68	mg/L	1.0		70	130			A
Selenium		0.0494	mg/L	0.0010	98	70	130			
Silver		0.0177	mg/L	0.0010	89	70	130			
Sodium		32.4	mg/L	1.0		70	130			A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100417	
Lab ID: H14090136-035BMS	23	Sample Matrix Spike				Run: ICPMS204-B_140910A			09/11/14 07:50	
Uranium		0.0565	mg/L	0.00030	100	70	130			
Vanadium		0.0506	mg/L	0.010	101	70	130			
Zinc		0.195	mg/L	0.010	98	70	130			
Lab ID: H14090136-035BMSD	23	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140910A			09/11/14 07:55	
Antimony		0.0471	mg/L	0.0010	94	70	130	2.8	20	
Arsenic		0.0610	mg/L	0.0010	100	70	130	3.1	20	
Barium		0.0711	mg/L	0.050	93	70	130	2.6	20	
Beryllium		0.0472	mg/L	0.0010	94	70	130	0.8	20	
Boron		0.153	mg/L	0.050	91	70	130	1.6	20	
Cadmium		0.0468	mg/L	0.0010	92	70	130	2.5	20	
Calcium		105	mg/L	1.0		70	130	3.9	20	A
Chromium		0.0492	mg/L	0.0050	98	70	130	2.0	20	
Cobalt		0.0476	mg/L	0.0050	93	70	130	0.6	20	
Copper		0.126	mg/L	0.0050	95	70	130	2.9	20	
Iron		0.383	mg/L	0.020	125	70	130	7.4	20	
Lead		0.0480	mg/L	0.0010	95	70	130	0.9	20	
Magnesium		20.8	mg/L	1.0		70	130	2.8	20	A
Manganese		0.639	mg/L	0.0010		70	130	1.3	20	A
Molybdenum		0.0525	mg/L	0.0010	99	70	130	2.5	20	
Nickel		0.0491	mg/L	0.0050	97	70	130	2.7	20	
Potassium		8.42	mg/L	1.0		70	130	3.1	20	A
Selenium		0.0506	mg/L	0.0010	101	70	130	2.5	20	
Silver		0.0175	mg/L	0.0010	88	70	130	1.0	20	
Sodium		31.6	mg/L	1.0		70	130	2.6	20	A
Uranium		0.0561	mg/L	0.00030	99	70	130	0.7	20	
Vanadium		0.0499	mg/L	0.010	99	70	130	1.4	20	
Zinc		0.190	mg/L	0.010	88	70	130	2.6	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140916A		
Lab ID: ICV STD	24	Initial Calibration Verification Standard							09/16/14 12:43	
Aluminum		0.294	mg/L	0.10	98	90	110			
Antimony		0.0592	mg/L	0.050	99	90	110			
Arsenic		0.0599	mg/L	0.0050	100	90	110			
Barium		0.0592	mg/L	0.10	99	90	110			
Beryllium		0.0302	mg/L	0.0010	101	90	110			
Boron		0.0607	mg/L	0.10	101	90	110			
Cadmium		0.0314	mg/L	0.0010	105	90	110			
Calcium		3.13	mg/L	0.50	104	90	110			
Chromium		0.0612	mg/L	0.010	102	90	110			
Cobalt		0.0607	mg/L	0.010	101	90	110			
Copper		0.0621	mg/L	0.010	104	90	110			
Iron		0.321	mg/L	0.020	107	90	110			
Lead		0.0594	mg/L	0.010	99	90	110			
Magnesium		3.20	mg/L	0.50	107	90	110			
Manganese		0.299	mg/L	0.010	100	90	110			
Molybdenum		0.0596	mg/L	0.0050	99	90	110			
Nickel		0.0627	mg/L	0.010	105	90	110			
Potassium		3.18	mg/L	0.50	106	90	110			
Selenium		0.0614	mg/L	0.0050	102	90	110			
Silver		0.0298	mg/L	0.0050	99	90	110			
Sodium		3.13	mg/L	0.50	104	90	110			
Uranium		0.0590	mg/L	0.0010	98	90	110			
Vanadium		0.0600	mg/L	0.10	100	90	110			
Zinc		0.0629	mg/L	0.010	105	90	110			
Lab ID: ICSA	24	Interference Check Sample A							09/16/14 12:47	
Aluminum		39.2	mg/L	0.10	98	70	130			
Antimony		9.00E-05	mg/L	0.050						
Arsenic		0.000100	mg/L	0.0050						
Barium		0.000113	mg/L	0.10						
Beryllium		-2.00E-06	mg/L	0.0010						
Boron		0.00328	mg/L	0.10						
Cadmium		0.000560	mg/L	0.0010						
Calcium		121	mg/L	0.50	101	70	130			
Chromium		0.00114	mg/L	0.010						
Cobalt		0.000278	mg/L	0.010						
Copper		0.000344	mg/L	0.010						
Iron		102	mg/L	0.020	102	70	130			
Lead		0.000255	mg/L	0.010						
Magnesium		41.0	mg/L	0.50	103	70	130			
Manganese		-0.000645	mg/L	0.010						
Molybdenum		0.867	mg/L	0.0050	108	70	130			
Nickel		0.000651	mg/L	0.010						
Potassium		41.9	mg/L	0.50	105	70	130			

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140916A	
Lab ID: ICSA	24	Interference Check Sample A							09/16/14 12:47	
Selenium		0.000186	mg/L	0.0050						
Silver		0.000133	mg/L	0.0050						
Sodium		103	mg/L	0.50	103	70	130			
Uranium		3.80E-05	mg/L	0.0010						
Vanadium		6.40E-05	mg/L	0.10						
Zinc		0.00164	mg/L	0.010						
Lab ID: ICSAB	24	Interference Check Sample AB							09/16/14 12:52	
Aluminum		39.1	mg/L	0.10	98	70	130			
Antimony		0.000633	mg/L	0.050		0	0			
Arsenic		0.0112	mg/L	0.0050	112	70	130			
Barium		0.000132	mg/L	0.10		0	0			
Beryllium		-5.00E-06	mg/L	0.0010		0	0			
Boron		0.00265	mg/L	0.10		0	0			
Cadmium		0.0102	mg/L	0.0010	102	70	130			
Calcium		119	mg/L	0.50	99	70	130			
Chromium		0.0222	mg/L	0.010	111	70	130			
Cobalt		0.0208	mg/L	0.010	104	70	130			
Copper		0.0212	mg/L	0.010	106	70	130			
Iron		101	mg/L	0.020	101	70	130			
Lead		0.000272	mg/L	0.010		0	0			
Magnesium		41.2	mg/L	0.50	103	70	130			
Manganese		0.0199	mg/L	0.010	99	70	130			
Molybdenum		0.848	mg/L	0.0050	106	70	130			
Nickel		0.0216	mg/L	0.010	108	70	130			
Potassium		41.5	mg/L	0.50	104	70	130			
Selenium		0.0122	mg/L	0.0050	122	70	130			
Silver		0.0183	mg/L	0.0050	92	70	130			
Sodium		104	mg/L	0.50	104	70	130			
Uranium		1.50E-05	mg/L	0.0010		0	0			
Vanadium		0.0212	mg/L	0.10	106	70	130			
Zinc		0.0117	mg/L	0.010	117	70	130			
Lab ID: ICSA	24	Interference Check Sample A							09/17/14 00:27	
Aluminum		40.0	mg/L	0.10	100	70	130			
Antimony		6.50E-05	mg/L	0.050						
Arsenic		0.000104	mg/L	0.0050						
Barium		8.80E-05	mg/L	0.10						
Beryllium		-6.00E-06	mg/L	0.0010						
Boron		0.00355	mg/L	0.10						
Cadmium		0.000495	mg/L	0.0010						
Calcium		129	mg/L	0.50	107	70	130			
Chromium		0.00110	mg/L	0.010						
Cobalt		0.000267	mg/L	0.010						
Copper		0.000310	mg/L	0.010						

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140916A		
Lab ID: ICSA	24	Interference Check Sample A								09/17/14 00:27
Iron		103	mg/L	0.020	103	70	130			
Lead		0.000243	mg/L	0.010						
Magnesium		42.6	mg/L	0.50	106	70	130			
Manganese		-0.000736	mg/L	0.010						
Molybdenum		0.897	mg/L	0.0050	112	70	130			
Nickel		0.000631	mg/L	0.010						
Potassium		45.3	mg/L	0.50	113	70	130			
Selenium		5.80E-05	mg/L	0.0050						
Silver		8.90E-05	mg/L	0.0050						
Sodium		109	mg/L	0.50	109	70	130			
Uranium		6.00E-06	mg/L	0.0010						
Vanadium		5.80E-05	mg/L	0.10						
Zinc		0.00156	mg/L	0.010						
Lab ID: ICSAB	24	Interference Check Sample AB								09/17/14 00:31
Aluminum		40.2	mg/L	0.10	100	70	130			
Antimony		0.000636	mg/L	0.050		0	0			
Arsenic		0.0111	mg/L	0.0050	111	70	130			
Barium		0.000121	mg/L	0.10		0	0			
Beryllium		-5.00E-06	mg/L	0.0010		0	0			
Boron		0.00334	mg/L	0.10		0	0			
Cadmium		0.00972	mg/L	0.0010	97	70	130			
Calcium		126	mg/L	0.50	105	70	130			
Chromium		0.0223	mg/L	0.010	112	70	130			
Cobalt		0.0206	mg/L	0.010	103	70	130			
Copper		0.0209	mg/L	0.010	105	70	130			
Iron		102	mg/L	0.020	102	70	130			
Lead		0.000259	mg/L	0.010		0	0			
Magnesium		42.4	mg/L	0.50	106	70	130			
Manganese		0.0198	mg/L	0.010	99	70	130			
Molybdenum		0.891	mg/L	0.0050	111	70	130			
Nickel		0.0216	mg/L	0.010	108	70	130			
Potassium		44.9	mg/L	0.50	112	70	130			
Selenium		0.0122	mg/L	0.0050	122	70	130			
Silver		0.0188	mg/L	0.0050	94	70	130			
Sodium		108	mg/L	0.50	108	70	130			
Uranium		6.00E-06	mg/L	0.0010		0	0			
Vanadium		0.0217	mg/L	0.10	108	70	130			
Zinc		0.0120	mg/L	0.010	120	70	130			
Method: E200.8										Batch: 26113
Lab ID: MB-26113	24	Method Blank				Run: ICPMS204-B_140916A				09/16/14 15:45
Aluminum		0.003	mg/L	0.0006						
Antimony		ND	mg/L	3E-05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 26113
Lab ID: MB-26113	24	Method Blank				Run: ICPMS204-B_140916A				09/16/14 15:45
Arsenic		6E-05	mg/L	6E-05						
Barium		ND	mg/L	0.0002						
Beryllium		ND	mg/L	5E-05						
Boron		0.002	mg/L	0.001						
Cadmium		ND	mg/L	3E-05						
Calcium		ND	mg/L	0.02						
Chromium		ND	mg/L	5E-05						
Cobalt		ND	mg/L	2E-05						
Copper		ND	mg/L	0.0003						
Iron		0.003	mg/L	0.002						
Lead		ND	mg/L	3E-05						
Magnesium		0.002	mg/L	0.002						
Manganese		ND	mg/L	0.00010						
Molybdenum		ND	mg/L	3E-05						
Nickel		ND	mg/L	0.0003						
Potassium		ND	mg/L	0.02						
Selenium		ND	mg/L	0.0002						
Silver		ND	mg/L	7E-05						
Sodium		0.05	mg/L	0.03						
Uranium		ND	mg/L	3E-05						
Vanadium		0.0003	mg/L	7E-05						
Zinc		0.001	mg/L	0.001						
Lab ID: LCS-26113	24	Laboratory Control Sample				Run: ICPMS204-B_140916A				09/16/14 15:49
Aluminum		2.41	mg/L	0.030	96	85	115			
Antimony		0.514	mg/L	0.0010	103	85	115			
Arsenic		0.508	mg/L	0.0010	102	85	115			
Barium		0.499	mg/L	0.050	100	85	115			
Beryllium		0.256	mg/L	0.0010	102	85	115			
Boron		0.524	mg/L	0.050	104	85	115			
Cadmium		0.262	mg/L	0.0010	105	85	115			
Calcium		26.1	mg/L	1.0	104	85	115			
Chromium		0.503	mg/L	0.0050	101	85	115			
Cobalt		0.479	mg/L	0.0050	96	85	115			
Copper		0.506	mg/L	0.0050	101	85	115			
Iron		2.55	mg/L	0.020	102	85	115			
Lead		0.505	mg/L	0.0010	101	85	115			
Magnesium		25.3	mg/L	1.0	101	85	115			
Manganese		2.40	mg/L	0.0010	96	85	115			
Molybdenum		0.545	mg/L	0.0010	109	85	115			
Nickel		0.504	mg/L	0.0050	101	85	115			
Potassium		25.7	mg/L	1.0	103	85	115			
Selenium		0.518	mg/L	0.0010	104	85	115			
Silver		0.0491	mg/L	0.0010	98	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 26113
Lab ID: LCS-26113	24	Laboratory Control Sample				Run: ICPMS204-B_140916A			09/16/14 15:49	
Sodium		25.6	mg/L	1.0	102	85	115			
Uranium		0.500	mg/L	0.00030	100	85	115			
Vanadium		0.504	mg/L	0.010	101	85	115			
Zinc		0.503	mg/L	0.010	100	85	115			
Lab ID: H14090068-005CMS3	24	Sample Matrix Spike				Run: ICPMS204-B_140916A			09/16/14 16:03	
Aluminum		2.31	mg/L	0.030	90	70	130			
Antimony		0.490	mg/L	0.0010	98	70	130			
Arsenic		0.499	mg/L	0.0010	98	70	130			
Barium		0.915	mg/L	0.050	94	70	130			
Beryllium		0.241	mg/L	0.0010	96	70	130			
Boron		0.525	mg/L	0.050	97	70	130			
Cadmium		0.248	mg/L	0.0010	99	70	130			
Calcium		89.9	mg/L	1.0	89	70	130			
Chromium		0.488	mg/L	0.0050	98	70	130			
Cobalt		0.473	mg/L	0.0050	94	70	130			
Copper		0.477	mg/L	0.0050	95	70	130			
Iron		3.04	mg/L	0.020	92	70	130			
Lead		0.494	mg/L	0.0010	99	70	130			
Magnesium		46.0	mg/L	1.0	90	70	130			
Manganese		3.63	mg/L	0.0010	93	70	130			
Molybdenum		0.528	mg/L	0.0010	106	70	130			
Nickel		0.478	mg/L	0.0050	95	70	130			
Potassium		114	mg/L	1.0	89	70	130			
Selenium		0.449	mg/L	0.0010	90	70	130			
Silver		0.0453	mg/L	0.0010	90	70	130			
Sodium		148	mg/L	1.0		70	130			A
Uranium		0.501	mg/L	0.00030	100	70	130			
Vanadium		0.494	mg/L	0.010	99	70	130			
Zinc		0.468	mg/L	0.010	93	70	130			
Lab ID: H14090068-005CMSD	24	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140916A			09/16/14 16:07	
Aluminum		2.39	mg/L	0.030	94	70	130	3.5	20	
Antimony		0.505	mg/L	0.0010	101	70	130	3.0	20	
Arsenic		0.512	mg/L	0.0010	101	70	130	2.7	20	
Barium		0.945	mg/L	0.050	100	70	130	3.2	20	
Beryllium		0.248	mg/L	0.0010	99	70	130	2.8	20	
Boron		0.560	mg/L	0.050	104	70	130	6.5	20	
Cadmium		0.254	mg/L	0.0010	101	70	130	2.1	20	
Calcium		91.5	mg/L	1.0	96	70	130	1.8	20	
Chromium		0.496	mg/L	0.0050	99	70	130	1.6	20	
Cobalt		0.492	mg/L	0.0050	98	70	130	4.0	20	
Copper		0.492	mg/L	0.0050	98	70	130	3.1	20	
Iron		3.16	mg/L	0.020	96	70	130	3.7	20	
Lead		0.513	mg/L	0.0010	103	70	130	3.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 26113
Lab ID: H14090068-005CMSD	24	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140916A			09/16/14 16:07	
Magnesium		47.0	mg/L	1.0	94	70	130	2.0	20	
Manganese		3.74	mg/L	0.0010	97	70	130	2.8	20	
Molybdenum		0.541	mg/L	0.0010	108	70	130	2.4	20	
Nickel		0.492	mg/L	0.0050	98	70	130	2.9	20	
Potassium		116	mg/L	1.0	98	70	130	2.1	20	
Selenium		0.470	mg/L	0.0010	94	70	130	4.4	20	
Silver		0.0463	mg/L	0.0010	93	70	130	2.2	20	
Sodium		149	mg/L	1.0		70	130	1.1	20	A
Uranium		0.519	mg/L	0.00030	104	70	130	3.4	20	
Vanadium		0.508	mg/L	0.010	101	70	130	2.7	20	
Zinc		0.483	mg/L	0.010	96	70	130	3.2	20	
Method: E200.8										Batch: R100626
Lab ID: ICB	5	Method Blank				Run: ICPMS204-B_140916A			09/16/14 14:00	
Aluminum		0.0002	mg/L	0.0002						
Cadmium		ND	mg/L	6E-06						
Copper		ND	mg/L	3E-05						
Iron		0.0008	mg/L	0.0002						
Zinc		ND	mg/L	0.0003						
Lab ID: LFB	5	Laboratory Fortified Blank				Run: ICPMS204-B_140916A			09/16/14 14:04	
Aluminum		0.0491	mg/L	0.10	98	85	115			
Cadmium		0.0511	mg/L	0.0010	102	85	115			
Copper		0.0518	mg/L	0.010	104	85	115			
Iron		0.159	mg/L	0.020	105	85	115			
Zinc		0.0527	mg/L	0.010	105	85	115			
Lab ID: H14090136-004BMS	5	Sample Matrix Spike				Run: ICPMS204-B_140916A			09/16/14 17:09	
Aluminum		0.0992	mg/L	0.030	94	70	130			
Cadmium		0.0946	mg/L	0.0010	95	70	130			
Copper		0.100	mg/L	0.0050	99	70	130			
Iron		0.305	mg/L	0.020	99	70	130			
Zinc		0.104	mg/L	0.010	101	70	130			
Lab ID: H14090136-004BMSD	5	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140916A			09/16/14 17:13	
Aluminum		0.0995	mg/L	0.030	95	70	130	0.3	20	
Cadmium		0.0952	mg/L	0.0010	95	70	130	0.6	20	
Copper		0.100	mg/L	0.0050	99	70	130	0.0	20	
Iron		0.309	mg/L	0.020	101	70	130	1.6	20	
Zinc		0.105	mg/L	0.010	101	70	130	0.3	20	
Lab ID: H14090136-014BMS	5	Sample Matrix Spike				Run: ICPMS204-B_140916A			09/16/14 18:17	
Aluminum		0.105	mg/L	0.030	96	70	130			
Cadmium		0.0952	mg/L	0.0010	95	70	130			
Copper		0.103	mg/L	0.0050	102	70	130			
Iron		0.311	mg/L	0.020	102	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Report Date: 10/01/14
Project: Silver Bow Creek Monitoring
Work Order: H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R100626	
Lab ID: H14090136-014BMS	5	Sample Matrix Spike				Run: ICPMS204-B_140916A			09/16/14 18:17	
Zinc		0.109	mg/L	0.010	101	70	130			
Lab ID: H14090136-014BMSD	5	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140916A			09/16/14 18:21	
Aluminum		0.106	mg/L	0.030	97	70	130	1.0	20	
Cadmium		0.0950	mg/L	0.0010	95	70	130	0.2	20	
Copper		0.102	mg/L	0.0050	101	70	130	0.7	20	
Iron		0.317	mg/L	0.020	104	70	130	1.7	20	
Zinc		0.108	mg/L	0.010	101	70	130	0.8	20	
Lab ID: H14090136-041BMS	5	Sample Matrix Spike				Run: ICPMS204-B_140916A			09/16/14 21:13	
Aluminum		0.0948	mg/L	0.030	92	70	130			
Cadmium		0.0919	mg/L	0.0010	92	70	130			
Copper		0.101	mg/L	0.0050	99	70	130			
Iron		0.313	mg/L	0.020	97	70	130			
Zinc		0.409	mg/L	0.010	88	70	130			
Lab ID: H14090136-041BMSD	5	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140916A			09/16/14 21:18	
Aluminum		0.0947	mg/L	0.030	92	70	130	0.1	20	
Cadmium		0.0912	mg/L	0.0010	91	70	130	0.7	20	
Copper		0.101	mg/L	0.0050	100	70	130	0.0	20	
Iron		0.317	mg/L	0.020	98	70	130	1.0	20	
Zinc		0.412	mg/L	0.010	91	70	130	0.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140917A	
Lab ID: ICV STD	24	Initial Calibration Verification Standard							09/17/14 11:38	
Aluminum		0.301	mg/L	0.10	100	90	110			
Antimony		0.0608	mg/L	0.050	101	90	110			
Arsenic		0.0617	mg/L	0.0050	103	90	110			
Barium		0.0599	mg/L	0.10	100	90	110			
Beryllium		0.0302	mg/L	0.0010	101	90	110			
Boron		0.0618	mg/L	0.10	103	90	110			
Cadmium		0.0317	mg/L	0.0010	106	90	110			
Calcium		3.18	mg/L	0.50	106	90	110			
Chromium		0.0626	mg/L	0.010	104	90	110			
Cobalt		0.0605	mg/L	0.010	101	90	110			
Copper		0.0633	mg/L	0.010	105	90	110			
Iron		0.324	mg/L	0.020	108	90	110			
Lead		0.0595	mg/L	0.010	99	90	110			
Magnesium		3.24	mg/L	0.50	108	90	110			
Manganese		0.299	mg/L	0.010	100	90	110			
Molybdenum		0.0606	mg/L	0.0050	101	90	110			
Nickel		0.0633	mg/L	0.010	105	90	110			
Potassium		3.19	mg/L	0.50	106	90	110			
Selenium		0.0629	mg/L	0.0050	105	90	110			
Silver		0.0301	mg/L	0.0050	100	90	110			
Sodium		3.16	mg/L	0.50	105	90	110			
Uranium		0.0601	mg/L	0.0010	100	90	110			
Vanadium		0.0610	mg/L	0.10	102	90	110			
Zinc		0.0636	mg/L	0.010	106	90	110			
Lab ID: ICSA	24	Interference Check Sample A							09/17/14 11:42	
Aluminum		37.7	mg/L	0.10	94	70	130			
Antimony		7.60E-05	mg/L	0.050						
Arsenic		7.10E-05	mg/L	0.0050						
Barium		0.000121	mg/L	0.10						
Beryllium		1.00E-05	mg/L	0.0010						
Boron		0.00164	mg/L	0.10						
Cadmium		0.000509	mg/L	0.0010						
Calcium		118	mg/L	0.50	99	70	130			
Chromium		0.00108	mg/L	0.010						
Cobalt		0.000212	mg/L	0.010						
Copper		0.000371	mg/L	0.010						
Iron		99.3	mg/L	0.020	99	70	130			
Lead		0.000241	mg/L	0.010						
Magnesium		39.9	mg/L	0.50	100	70	130			
Manganese		-0.000145	mg/L	0.010						
Molybdenum		0.834	mg/L	0.0050	104	70	130			
Nickel		0.000656	mg/L	0.010						
Potassium		40.6	mg/L	0.50	101	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140917A		
Lab ID: ICSA	24	Interference Check Sample A							09/17/14 11:42	
Selenium		0.000132	mg/L	0.0050						
Silver		0.000157	mg/L	0.0050						
Sodium		100	mg/L	0.50	100	70	130			
Uranium		3.70E-05	mg/L	0.0010						
Vanadium		7.90E-05	mg/L	0.10						
Zinc		0.00152	mg/L	0.010						
Lab ID: ICSAB	24	Interference Check Sample AB							09/17/14 11:46	
Aluminum		37.1	mg/L	0.10	93	70	130			
Antimony		0.000578	mg/L	0.050		0	0			
Arsenic		0.0106	mg/L	0.0050	106	70	130			
Barium		0.000147	mg/L	0.10		0	0			
Beryllium		7.00E-06	mg/L	0.0010		0	0			
Boron		0.00105	mg/L	0.10		0	0			
Cadmium		0.00976	mg/L	0.0010	98	70	130			
Calcium		118	mg/L	0.50	98	70	130			
Chromium		0.0211	mg/L	0.010	105	70	130			
Cobalt		0.0196	mg/L	0.010	98	70	130			
Copper		0.0201	mg/L	0.010	101	70	130			
Iron		97.3	mg/L	0.020	97	70	130			
Lead		0.000258	mg/L	0.010		0	0			
Magnesium		39.2	mg/L	0.50	98	70	130			
Manganese		0.0191	mg/L	0.010	96	70	130			
Molybdenum		0.820	mg/L	0.0050	102	70	130			
Nickel		0.0207	mg/L	0.010	103	70	130			
Potassium		40.1	mg/L	0.50	100	70	130			
Selenium		0.0120	mg/L	0.0050	120	70	130			
Silver		0.0177	mg/L	0.0050	89	70	130			
Sodium		98.4	mg/L	0.50	98	70	130			
Uranium		1.80E-05	mg/L	0.0010		0	0			
Vanadium		0.0205	mg/L	0.10	103	70	130			
Zinc		0.0119	mg/L	0.010	119	70	130			
Lab ID: ICSA	24	Interference Check Sample A							09/18/14 00:48	
Aluminum		37.2	mg/L	0.10	93	70	130			
Antimony		3.00E-05	mg/L	0.050						
Arsenic		9.90E-05	mg/L	0.0050						
Barium		0.000114	mg/L	0.10						
Beryllium		-2.00E-06	mg/L	0.0010						
Boron		0.00200	mg/L	0.10						
Cadmium		0.000509	mg/L	0.0010						
Calcium		118	mg/L	0.50	98	70	130			
Chromium		0.00104	mg/L	0.010						
Cobalt		0.000234	mg/L	0.010						
Copper		0.000407	mg/L	0.010						

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS204-B_140917A		
Lab ID: ICSA	24	Interference Check Sample A								09/18/14 00:48
Iron		97.5	mg/L	0.020	98	70	130			
Lead		0.000235	mg/L	0.010						
Magnesium		39.8	mg/L	0.50	100	70	130			
Manganese		-0.000243	mg/L	0.010						
Molybdenum		0.823	mg/L	0.0050	103	70	130			
Nickel		0.000644	mg/L	0.010						
Potassium		40.4	mg/L	0.50	101	70	130			
Selenium		6.80E-05	mg/L	0.0050						
Silver		6.80E-05	mg/L	0.0050						
Sodium		99.2	mg/L	0.50	99	70	130			
Uranium		5.00E-06	mg/L	0.0010						
Vanadium		0.000113	mg/L	0.10						
Zinc		0.00163	mg/L	0.010						
Lab ID: ICSAB	24	Interference Check Sample AB								09/18/14 00:53
Aluminum		36.6	mg/L	0.10	91	70	130			
Antimony		0.000548	mg/L	0.050		0	0			
Arsenic		0.0113	mg/L	0.0050	113	70	130			
Barium		0.000117	mg/L	0.10		0	0			
Beryllium		-1.30E-05	mg/L	0.0010		0	0			
Boron		0.00181	mg/L	0.10		0	0			
Cadmium		0.00998	mg/L	0.0010	100	70	130			
Calcium		118	mg/L	0.50	99	70	130			
Chromium		0.0216	mg/L	0.010	108	70	130			
Cobalt		0.0196	mg/L	0.010	98	70	130			
Copper		0.0208	mg/L	0.010	104	70	130			
Iron		100	mg/L	0.020	100	70	130			
Lead		0.000254	mg/L	0.010		0	0			
Magnesium		39.9	mg/L	0.50	100	70	130			
Manganese		0.0186	mg/L	0.010	93	70	130			
Molybdenum		0.827	mg/L	0.0050	103	70	130			
Nickel		0.0213	mg/L	0.010	106	70	130			
Potassium		40.8	mg/L	0.50	102	70	130			
Selenium		0.0124	mg/L	0.0050	124	70	130			
Silver		0.0178	mg/L	0.0050	89	70	130			
Sodium		99.1	mg/L	0.50	99	70	130			
Uranium		6.00E-06	mg/L	0.0010		0	0			
Vanadium		0.0208	mg/L	0.10	104	70	130			
Zinc		0.0115	mg/L	0.010	115	70	130			
Method: E200.8										Batch: R100637
Lab ID: ICB	4	Method Blank				Run: ICPMS204-B_140917A				09/17/14 13:07
Aluminum		ND	mg/L	0.0002						
Antimony		ND	mg/L	1E-05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E200.8**									Batch: R100637	
Lab ID:	**ICB**	4	Method Blank				Run: ICPMS204-B_140917A			09/17/14 13:07	
Cadmium			ND	mg/L	6E-06						
Zinc			ND	mg/L	0.0003						
Lab ID:	**LFB**	4	Laboratory Fortified Blank				Run: ICPMS204-B_140917A			09/17/14 13:12	
Aluminum			0.0503	mg/L	0.10	101	85	115			
Antimony			0.0496	mg/L	0.050	99	85	115			
Cadmium			0.0520	mg/L	0.0010	104	85	115			
Zinc			0.0554	mg/L	0.010	111	85	115			
Lab ID:	**H14080568-001BMS**	4	Sample Matrix Spike				Run: ICPMS204-B_140917A			09/17/14 13:38	
Aluminum			0.753	mg/L	0.030		70	130			A
Antimony			0.0524	mg/L	0.0010	101	70	130			
Cadmium			0.0465	mg/L	0.0010	93	70	130			
Zinc			0.0524	mg/L	0.010	97	70	130			
Lab ID:	**H14080568-001BMSD**	4	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140917A			09/17/14 13:42	
Aluminum			0.675	mg/L	0.030		70	130	11	20	A
Antimony			0.0541	mg/L	0.0010	104	70	130	3.2	20	
Cadmium			0.0471	mg/L	0.0010	94	70	130	1.3	20	
Zinc			0.0533	mg/L	0.010	98	70	130	1.6	20	
Lab ID:	**H14090136-030BMS**	4	Sample Matrix Spike				Run: ICPMS204-B_140917A			09/17/14 15:10	
Aluminum			0.199	mg/L	0.030	124	70	130			
Antimony			0.0497	mg/L	0.0010	99	70	130			
Cadmium			0.0473	mg/L	0.0010	94	70	130			
Zinc			0.0661	mg/L	0.010	96	70	130			
Lab ID:	**H14090136-030BMSD**	4	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140917A			09/17/14 15:15	
Aluminum			0.224	mg/L	0.030	173	70	130	12	20	S
Antimony			0.0508	mg/L	0.0010	101	70	130	2.1	20	
Cadmium			0.0479	mg/L	0.0010	95	70	130	1.2	20	
Zinc			0.0684	mg/L	0.010	100	70	130	3.5	20	
Lab ID:	**H14090214-005DMS**	4	Sample Matrix Spike				Run: ICPMS204-B_140917A			09/17/14 16:56	
Aluminum			0.0523	mg/L	0.030	96	70	130			
Antimony			0.0493	mg/L	0.0010	98	70	130			
Cadmium			0.0484	mg/L	0.0010	97	70	130			
Zinc			0.0531	mg/L	0.010	101	70	130			
Lab ID:	**H14090214-005DMSD**	4	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140917A			09/17/14 17:00	
Aluminum			0.0519	mg/L	0.030	96	70	130	0.7	20	
Antimony			0.0497	mg/L	0.0010	99	70	130	0.8	20	
Cadmium			0.0481	mg/L	0.0010	96	70	130	0.7	20	
Zinc			0.0526	mg/L	0.010	100	70	130	0.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140919A	
Lab ID: ICV STD	2	Initial Calibration Verification Standard							09/19/14 10:38	
Aluminum		0.297	mg/L	0.10	99	90	110			
Manganese		0.302	mg/L	0.010	101	90	110			
Lab ID: ICSA	2	Interference Check Sample A							09/19/14 10:42	
Aluminum		37.7	mg/L	0.10	94	70	130			
Manganese		0.000147	mg/L	0.010						
Lab ID: ICSAB	2	Interference Check Sample AB							09/19/14 10:47	
Aluminum		37.6	mg/L	0.10	94	70	130			
Manganese		0.0198	mg/L	0.010	99	70	130			
Method: E200.8									Batch: R100723	
Lab ID: ICB	2	Method Blank				Run: ICPMS204-B_140919A			09/19/14 11:09	
Aluminum		0.0003	mg/L	0.0002						
Manganese		ND	mg/L	2E-05						
Lab ID: LFB	2	Laboratory Fortified Blank				Run: ICPMS204-B_140919A			09/19/14 11:13	
Aluminum		0.0507	mg/L	0.10	101	85	115			
Manganese		0.0513	mg/L	0.010	103	85	115			
Lab ID: H14080568-001BMS	2	Sample Matrix Spike				Run: ICPMS204-B_140919A			09/19/14 13:25	
Aluminum		0.975	mg/L	0.030	152	70	130			S
Manganese		0.330	mg/L	0.0010	98	70	130			
Lab ID: H14080568-001BMSD	2	Sample Matrix Spike Duplicate				Run: ICPMS204-B_140919A			09/19/14 13:29	
Aluminum		0.921	mg/L	0.030	130	70	130	5.7	20	
Manganese		0.329	mg/L	0.0010	98	70	130	0.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14
Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS204-B_140924A	
Lab ID: ICV STD		Initial Calibration Verification Standard							09/24/14 14:35	
Iron		0.318	mg/L	0.020	106	90	110			
Lab ID: ICSA		Interference Check Sample A							09/24/14 14:40	
Iron		95.8	mg/L	0.020	96	70	130			
Lab ID: ICSAB		Interference Check Sample AB							09/24/14 14:44	
Iron		94.1	mg/L	0.020	94	70	130			
Lab ID: ICV STD		Initial Calibration Verification Standard							09/24/14 17:59	
Iron		0.315	mg/L	0.020	105	90	110			
Lab ID: ICSA		Interference Check Sample A							09/24/14 18:03	
Iron		96.7	mg/L	0.020	97	70	130			
Lab ID: ICSAB		Interference Check Sample AB							09/24/14 18:07	
Iron		95.9	mg/L	0.020	96	70	130			
Lab ID: ICSA		Interference Check Sample A							09/25/14 08:36	
Iron		95.6	mg/L	0.020	96	70	130			
Lab ID: ICSAB		Interference Check Sample AB							09/25/14 08:41	
Iron		98.0	mg/L	0.020	98	70	130			
Method: E200.8										Batch: R100883
Lab ID: ICB		Method Blank				Run: ICPMS204-B_140924A			09/24/14 15:15	
Iron		0.001	mg/L	0.0002						
Lab ID: LFB		Laboratory Fortified Blank				Run: ICPMS204-B_140924A			09/24/14 15:20	
Iron		0.159	mg/L	0.020	106	85	115			
Lab ID: H14090349-011BMS		Sample Matrix Spike				Run: ICPMS204-B_140924A			09/25/14 00:41	
Iron		0.193	mg/L	0.020	104	70	130			
Lab ID: H14090349-011BMSD		Sample Matrix Spike Duplicate				Run: ICPMS204-B_140924A			09/25/14 00:45	
Iron		0.189	mg/L	0.020	102	70	130	2.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1								Analytical Run: HGCV202-H_140917A		
Lab ID: ICV		Initial Calibration Verification Standard								09/17/14 11:00
Mercury		0.00019	mg/L	0.00010	94	90	110			
Lab ID: ICV		Initial Calibration Verification Standard								09/17/14 12:28
Mercury		0.00019	mg/L	0.00010	97	90	110			
Lab ID: ICV		Initial Calibration Verification Standard								09/17/14 13:36
Mercury		0.00019	mg/L	0.00010	96	90	110			
Lab ID: CCV1		Continuing Calibration Verification Standard								09/17/14 13:40
Mercury		0.00019	mg/L	0.00010	96	95	105			
Lab ID: CCV		Continuing Calibration Verification Standard								09/17/14 14:59
Mercury		0.00021	mg/L	0.00010	103	90	110			
Method: E245.1										Batch: 26176
Lab ID: MB-26176		Method Blank				Run: HGCV202-H_140917A				09/17/14 11:13
Mercury		2E-06	mg/L	1E-06						
Lab ID: LCS-26176		Laboratory Control Sample				Run: HGCV202-H_140917A				09/17/14 11:21
Mercury		0.00015	mg/L	0.00010	101	90	110			
Lab ID: H14090097-002AMS		Sample Matrix Spike				Run: HGCV202-H_140917A				09/17/14 14:21
Mercury		0.00018	mg/L	0.00010	115	70	130			
Lab ID: H14090097-002AMSD		Sample Matrix Spike Duplicate				Run: HGCV202-H_140917A				09/17/14 14:25
Mercury		0.00017	mg/L	0.00010	108	70	130	5.9	20	
Lab ID: H14090120-001BMS		Sample Matrix Spike				Run: HGCV202-H_140917A				09/17/14 15:49
Mercury		0.00012	mg/L	0.00010	81	70	130			
Lab ID: H14090120-001BMSD		Sample Matrix Spike Duplicate				Run: HGCV202-H_140917A				09/17/14 15:53
Mercury		0.00017	mg/L	0.00010	111	70	130	2.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14

Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1								Analytical Run: HGCV202-H_140918A		
Lab ID: ICV	Initial Calibration Verification Standard								09/18/14 13:35	
Mercury		0.00019	mg/L	0.00010	94	90	110			
Lab ID: ICV	Initial Calibration Verification Standard								09/18/14 14:23	
Mercury		0.00019	mg/L	0.00010	95	90	110			
Lab ID: ICV	Initial Calibration Verification Standard								09/18/14 16:07	
Mercury		0.00019	mg/L	0.00010	94	90	110			
Lab ID: CCV1	Continuing Calibration Verification Standard								09/18/14 16:11	
Mercury		0.00019	mg/L	0.00010	97	95	105			
Lab ID: CCV	Continuing Calibration Verification Standard								09/18/14 17:24	
Mercury		0.00019	mg/L	0.00010	97	90	110			
Method: E245.1										Batch: 26177
Lab ID: MB-26177	Method Blank					Run: HGCV202-H_140918A			09/18/14 14:36	
Mercury		ND	mg/L	1E-06						
Lab ID: LCS-26177	Laboratory Control Sample					Run: HGCV202-H_140918A			09/18/14 16:28	
Mercury		0.00017	mg/L	0.00010	115	90	110			S
Lab ID: H14090136-023BMS	Sample Matrix Spike					Run: HGCV202-H_140918A			09/18/14 17:07	
Mercury		0.00017	mg/L	0.00010	89	70	130			
Lab ID: H14090136-023BMSD	Sample Matrix Spike Duplicate					Run: HGCV202-H_140918A			09/18/14 17:11	
Mercury		0.00015	mg/L	0.00010	73	70	130	15	20	
Lab ID: H14090136-026BMS	Sample Matrix Spike					Run: HGCV202-H_140918A			09/18/14 17:37	
Mercury		0.00016	mg/L	0.00010	85	70	130			
Lab ID: H14090136-026BMSD	Sample Matrix Spike Duplicate					Run: HGCV202-H_140918A			09/18/14 17:41	
Mercury		0.00016	mg/L	0.00010	88	70	130	2.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14
Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E245.1**								Analytical Run: HGCV202-H_140924A		
Lab ID:	**ICV**		Initial Calibration Verification Standard							09/24/14 11:12	
Mercury			0.00020	mg/L	0.00010	102	90	110			
Lab ID:	**CCV1**		Continuing Calibration Verification Standard							09/24/14 11:16	
Mercury			0.00020	mg/L	0.00010	98	95	105			
Lab ID:	**CCV**		Continuing Calibration Verification Standard							09/24/14 12:32	
Mercury			0.00020	mg/L	0.00010	102	90	110			
Lab ID:	**CCV**		Continuing Calibration Verification Standard							09/24/14 13:31	
Mercury			0.00021	mg/L	0.00010	103	90	110			
Method:	**E245.1**										Batch: 26287
Lab ID:	**MB-26287**		Method Blank				Run: HGCV202-H_140924A			09/24/14 11:24	
Mercury			3E-06	mg/L	1E-06						
Lab ID:	**LCS-26287**		Laboratory Control Sample				Run: HGCV202-H_140924A			09/24/14 11:37	
Mercury			0.00016	mg/L	0.00010	102	90	110			
Lab ID:	**H14090136-031BMS**		Sample Matrix Spike				Run: HGCV202-H_140924A			09/24/14 12:23	
Mercury			0.00014	mg/L	0.00010	90	70	130			
Lab ID:	**H14090136-031BMSD**		Sample Matrix Spike Duplicate				Run: HGCV202-H_140924A			09/24/14 12:28	
Mercury			0.00014	mg/L	0.00010	92	70	130	1.9	20	
Lab ID:	**H14090136-043BMS**		Sample Matrix Spike				Run: HGCV202-H_140924A			09/24/14 13:23	
Mercury			0.00014	mg/L	0.00010	93	70	130			
Lab ID:	**H14090136-043BMSD**		Sample Matrix Spike Duplicate				Run: HGCV202-H_140924A			09/24/14 13:27	
Mercury			0.00015	mg/L	0.00010	94	70	130	0.8	20	
Method:	**E245.1**										Batch: 26288
Lab ID:	**MB-26288**		Method Blank				Run: HGCV202-H_140924A			09/24/14 13:39	
Mercury			3E-06	mg/L	1E-06						
Lab ID:	**LCS-26288**		Laboratory Control Sample				Run: HGCV202-H_140924A			09/24/14 13:44	
Mercury			0.00016	mg/L	0.00010	103	90	110			
Lab ID:	**H14090234-009CMS**		Sample Matrix Spike				Run: HGCV202-H_140924A			09/24/14 14:30	
Mercury			0.00015	mg/L	0.00010	92	70	130			
Lab ID:	**H14090234-009CMSD**		Sample Matrix Spike Duplicate				Run: HGCV202-H_140924A			09/24/14 14:34	
Mercury			0.00016	mg/L	0.00010	96	70	130	3.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14
Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC102-H_140909A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							09/09/14 16:08	
Chloride			100	mg/L	1.0	101	90	110			
Sulfate			400	mg/L	1.0	100	90	110			
Lab ID:	**CCV090914-1**	2	Continuing Calibration Verification Standard							09/09/14 16:52	
Chloride			100	mg/L	1.0	103	90	110			
Sulfate			410	mg/L	1.0	102	90	110			
Lab ID:	**CCV090914-2**	2	Continuing Calibration Verification Standard							09/09/14 19:28	
Chloride			100	mg/L	1.0	103	90	110			
Sulfate			410	mg/L	1.0	103	90	110			
Lab ID:	**CCV090914-3**	2	Continuing Calibration Verification Standard							09/09/14 22:03	
Chloride			100	mg/L	1.0	103	90	110			
Sulfate			410	mg/L	1.0	103	90	110			
Lab ID:	**CCV090914-4**	2	Continuing Calibration Verification Standard							09/10/14 00:39	
Chloride			100	mg/L	1.0	102	90	110			
Sulfate			410	mg/L	1.0	103	90	110			
Method:	**E300.0**									Batch: R100406	
Lab ID:	**ICB**	2	Method Blank				Run: IC102-H_140909A			09/09/14 16:19	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.08						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC102-H_140909A			09/09/14 16:30	
Chloride			48	mg/L	1.0	96	90	110			
Sulfate			190	mg/L	1.0	97	90	110			
Lab ID:	**H14090136-001AMS**	2	Sample Matrix Spike				Run: IC102-H_140909A			09/09/14 17:25	
Chloride			55	mg/L	1.0	101	90	110			
Sulfate			660	mg/L	1.0	105	90	110			
Lab ID:	**H14090136-001AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140909A			09/09/14 17:37	
Chloride			55	mg/L	1.0	100	90	110	0.2	20	
Sulfate			660	mg/L	1.0	106	90	110	0.1	20	
Lab ID:	**H14090136-011AMS**	2	Sample Matrix Spike				Run: IC102-H_140909A			09/09/14 20:01	
Chloride			120	mg/L	1.0	100	90	110			
Sulfate			390	mg/L	1.0	105	90	110			
Lab ID:	**H14090136-011AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140909A			09/09/14 20:12	
Chloride			120	mg/L	1.0	99	90	110	0.4	20	
Sulfate			390	mg/L	1.0	105	90	110	0.1	20	
Lab ID:	**H14090136-022AMS**	2	Sample Matrix Spike				Run: IC102-H_140909A			09/09/14 22:36	
Chloride			270	mg/L	1.0	101	90	110			
Sulfate			1100	mg/L	1.0	104	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14
Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Batch: R100406	
Lab ID:	**H14090136-022AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140909A			09/09/14 22:48	
Chloride			270	mg/L	1.0	102	90	110	0.7	20	
Sulfate			1100	mg/L	1.0	104	90	110	0.3	20	
Lab ID:	**H14090136-032AMS**	2	Sample Matrix Spike				Run: IC102-H_140909A			09/10/14 01:12	
Chloride			49	mg/L	1.0	98	90	110			
Sulfate			200	mg/L	1.0	100	90	110			
Lab ID:	**H14090136-032AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140909A			09/10/14 01:23	
Chloride			50	mg/L	1.0	100	90	110	1.3	20	
Sulfate			200	mg/L	1.0	100	90	110	0.2	20	
Method:	**E300.0**									Analytical Run: IC102-H_140911A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							09/11/14 13:01	
Chloride			100	mg/L	1.0	101	90	110			
Sulfate			410	mg/L	1.0	101	90	110			
Lab ID:	**CCV091114-1**	2	Continuing Calibration Verification Standard							09/11/14 13:45	
Chloride			100	mg/L	1.0	102	90	110			
Sulfate			410	mg/L	1.0	102	90	110			
Method:	**E300.0**									Batch: R100470	
Lab ID:	**ICB**	2	Method Blank				Run: IC102-H_140911A			09/11/14 13:12	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.08						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC102-H_140911A			09/11/14 13:23	
Chloride			49	mg/L	1.0	98	90	110			
Sulfate			200	mg/L	1.0	101	90	110			
Lab ID:	**H14090136-042AMS**	2	Sample Matrix Spike				Run: IC102-H_140911A			09/11/14 14:19	
Chloride			75	mg/L	1.0	104	90	110			
Sulfate			310	mg/L	1.0	107	90	110			
Lab ID:	**H14090136-042AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140911A			09/11/14 14:30	
Chloride			76	mg/L	1.0	105	90	110	0.6	20	
Sulfate			310	mg/L	1.0	107	90	110	0.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund **Report Date:** 10/01/14
Project: Silver Bow Creek Monitoring **Work Order:** H14090136

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC102-H_140915A	
Lab ID:	**ICV**		Initial Calibration Verification Standard							09/15/14 14:37	
Sulfate			400	mg/L	1.0	100	90	110			
Lab ID:	**CCV091514-1**		Continuing Calibration Verification Standard							09/15/14 15:11	
Sulfate			400	mg/L	1.0	101	90	110			
Method:	**E300.0**									Batch: R100569	
Lab ID:	**ICB**		Method Blank				Run: IC102-H_140915A			09/15/14 14:49	
Sulfate			ND	mg/L	0.08						
Lab ID:	**LFB**		Laboratory Fortified Blank				Run: IC102-H_140915A			09/15/14 15:00	
Sulfate			200	mg/L	1.0	98	90	110			
Lab ID:	**H14070369-006AMS**		Sample Matrix Spike				Run: IC102-H_140915A			09/15/14 15:44	
Sulfate			280	mg/L	1.0	103	90	110			
Lab ID:	**H14070369-006AMSD**		Sample Matrix Spike Duplicate				Run: IC102-H_140915A			09/15/14 15:55	
Sulfate			280	mg/L	1.0	102	90	110	0.6	20	
Method:	**E300.0**									Analytical Run: IC102-H_140918A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							09/18/14 15:17	
Chloride			100	mg/L	1.0	102	90	110			
Sulfate			410	mg/L	1.0	102	90	110			
Lab ID:	**CCV091814-1**	2	Continuing Calibration Verification Standard							09/18/14 16:02	
Chloride			100	mg/L	1.0	103	90	110			
Sulfate			410	mg/L	1.0	103	90	110			
Method:	**E300.0**									Batch: R100693	
Lab ID:	**ICB**	2	Method Blank				Run: IC102-H_140918A			09/18/14 15:28	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.08						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC102-H_140918A			09/18/14 15:39	
Chloride			48	mg/L	1.0	96	90	110			
Sulfate			200	mg/L	1.0	98	90	110			
Lab ID:	**H14090175-007AMS**	2	Sample Matrix Spike				Run: IC102-H_140918A			09/18/14 16:35	
Chloride			54	mg/L	1.0	100	90	110			
Sulfate			250	mg/L	1.0	104	90	110			
Lab ID:	**H14090175-007AMSD**	2	Sample Matrix Spike Duplicate				Run: IC102-H_140918A			09/18/14 16:46	
Chloride			52	mg/L	1.0	98	90	110	2.0	20	
Sulfate			240	mg/L	1.0	103	90	110	1.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Workorder Receipt Checklist

MT DEQ-Federal Superfund

H14090136

Login completed by: Tracy L. Lorash
Date Received: 9/8/2014
Reviewed by: BL2000\sdull
Received by: tsp
Reviewed Date: 9/9/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☐	No ☑	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☑	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Samples left in locked entry.
No time on pages 3 and 5 of the COC when client relinquished the COC.
Sample ID on COC is MW-2B -ID on bottle is MW2B. Logged in with ID from COC.
Sample ID on COC is Field Blank for sample collected at 1325 -ID on bottle is F. Blank. Logged in with ID from COC.
Sample ID on COC is GW-1003 -ID on bottle is GW-1003R. Logged in with ID from COC.
Sample ID on COC is Field Blank for sample collected at 945 -ID on bottle is Blank. Logged in with ID from COC.
Sample ID on COC is Field Blank for sample collected at 1940 -ID on bottle is F. Blank. Logged in with ID from COC.
Cooler 1 was received at 1.5°C, Cooler 2 at 0.7°C. Samples were received on wet ice.
Samples LYS-04, LYS-05, LYS-01, LYS-03 and LYS-07 do not have sufficient sample to do all analysis requested. Historically, the priority of analysis has been metals, IC, alkalinity. Samples for Dissolved Metals/Hardness were subsampled, filtered, and preserved to pH <2 with 2 mL of Nitric acid per 250 mL in the laboratory. According to 40CFR136, samples for Dissolved Metals should be filtered and preserved within 15 minutes of collection. TI 9/9/14

APPENDIX B4

ANALYTICAL LABORATORY RESULTS
4TH QUARTER MONITORING

ANALYTICAL SUMMARY REPORT

January 06, 2015

MT DEQ-Federal Superfund
PO Box 200901
Helena, MT 59620-0901

Work Order: H14120109 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 61 samples for MT DEQ-Federal Superfund on 12/5/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14120109-001	SS-06G	12/04/14 14:00	12/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14120109-002	SS-07	12/04/14 13:15	12/05/14	Aqueous	Same As Above
H14120109-003	SS-08	12/04/14 12:30	12/05/14	Aqueous	Same As Above
H14120109-004	SS-10A	12/04/14 11:30	12/05/14	Aqueous	Same As Above
H14120109-005	SS-10B	12/04/14 10:45	12/05/14	Aqueous	Same As Above
H14120109-006	SS-11C	12/04/14 10:00	12/05/14	Aqueous	Same As Above
H14120109-007	SS-11D	12/04/14 9:00	12/05/14	Aqueous	Same As Above
H14120109-008	Field Blank #1	12/03/14 16:30	12/05/14	Aqueous	Same As Above
H14120109-009	SS-13	12/03/14 17:00	12/05/14	Aqueous	Same As Above
H14120109-010	SS-13 Duplicate	12/03/14 17:00	12/05/14	Aqueous	Same As Above
H14120109-011	SS-14	12/03/14 15:15	12/05/14	Aqueous	Same As Above
H14120109-012	SS-15A	12/03/14 13:45	12/05/14	Aqueous	Same As Above
H14120109-013	SS-15B	12/03/14 12:15	12/05/14	Aqueous	Same As Above
H14120109-014	SS-16B	12/03/14 10:45	12/05/14	Aqueous	Same As Above
H14120109-015	SS-17D	12/03/14 9:45	12/05/14	Aqueous	Same As Above
H14120109-016	SS-19	12/03/14 9:00	12/05/14	Aqueous	Same As Above

ANALYTICAL SUMMARY REPORT

H14120109-017	SS-06G Sediment Sieve <0.065mm	12/04/14 14:00	12/05/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves Soil Preparation
H14120109-018	SS-06G Sediment Sieve 0.065-1mm	12/04/14 14:00	12/05/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14120109-019	SS-06G Sediment Sieve 1-2mm	12/04/14 14:00	12/05/14	Sediment	Same As Above
H14120109-020	SS-07 Sediment Sieve <0.065mm	12/04/14 13:15	12/05/14	Sediment	Same As Above
H14120109-021	SS-07 Sediment Sieve 0.065-1mm	12/04/14 13:15	12/05/14	Sediment	Same As Above
H14120109-022	SS-07 Sediment Sieve 1-2mm	12/04/14 13:15	12/05/14	Sediment	Same As Above
H14120109-023	SS-08 Sediment Sieve <0.065mm	12/04/14 12:30	12/05/14	Sediment	Same As Above
H14120109-024	SS-08 Sediment Sieve 0.065-1mm	12/04/14 12:30	12/05/14	Sediment	Same As Above
H14120109-025	SS-08 Sediment Sieve 1-2mm	12/04/14 12:30	12/05/14	Sediment	Same As Above
H14120109-026	SS-10A Sediment Sieve <0.065mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-027	SS-10A Sediment Sieve 0.065-1mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-028	SS-10A Sediment Sieve 1-2mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-029	SS-10A Duplicate 1 Sediment Sieve <0.065mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-030	SS-10A Duplicate 1 Sediment Sieve 0.065-1mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-031	SS-10A Duplicate 1 Sediment Sieve 1-2mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-032	SS-10A Duplicate 2 Sediment Sieve <0.065mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-033	SS-10A Duplicate 2 Sediment Sieve 0.065-1mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-034	SS-10A Duplicate 2 Sediment Sieve 1-2mm	12/04/14 11:30	12/05/14	Sediment	Same As Above
H14120109-035	SS-10B Sediment Sieve <0.065mm	12/04/14 10:45	12/05/14	Sediment	Same As Above
H14120109-036	SS-10B Sediment Sieve 0.065-1mm	12/04/14 10:45	12/05/14	Sediment	Same As Above
H14120109-037	SS-10B Sediment Sieve 1-2mm	12/04/14 10:45	12/05/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14120109-038	SS-11C Sediment Sieve <0.065mm	12/04/14 10:00	12/05/14	Sediment	Same As Above
H14120109-039	SS-11C Sediment Sieve 0.065-1mm	12/04/14 10:00	12/05/14	Sediment	Same As Above
H14120109-040	SS-11C Sediment Sieve 1-2mm	12/04/14 10:00	12/05/14	Sediment	Same As Above
H14120109-041	SS-11D Sediment Sieve <0.065mm	12/04/14 9:00	12/05/14	Sediment	Same As Above
H14120109-042	SS-11D Sediment Sieve 0.065-1mm	12/04/14 9:00	12/05/14	Sediment	Same As Above
H14120109-043	SS-11D Sediment Sieve 1-2mm	12/04/14 9:00	12/05/14	Sediment	Same As Above
H14120109-044	SS-13 Sediment Sieve <0.065mm	12/03/14 17:00	12/05/14	Sediment	Same As Above
H14120109-045	SS-13 Sediment Sieve 0.065-1mm	12/03/14 17:00	12/05/14	Sediment	Same As Above
H14120109-046	SS-13 Sediment Sieve 1-2mm	12/03/14 17:00	12/05/14	Sediment	Same As Above
H14120109-047	SS-14 Sediment Sieve <0.065mm	12/03/14 15:15	12/05/14	Sediment	Same As Above
H14120109-048	SS-14 Sediment Sieve 0.065-1mm	12/03/14 15:15	12/05/14	Sediment	Same As Above
H14120109-049	SS-14 Sediment Sieve 1-2mm	12/03/14 15:15	12/05/14	Sediment	Same As Above
H14120109-050	SS-15A Sediment Sieve <0.065mm	12/03/14 13:45	12/05/14	Sediment	Same As Above
H14120109-051	SS-15A Sediment Sieve 0.065-1mm	12/03/14 13:45	12/05/14	Sediment	Same As Above
H14120109-052	SS-15A Sediment Sieve 1-2mm	12/03/14 13:45	12/05/14	Sediment	Same As Above
H14120109-053	SS-15B Sediment Sieve <0.065mm	12/03/14 12:15	12/05/14	Sediment	Same As Above
H14120109-054	SS-15B Sediment Sieve 0.065-1mm	12/03/14 12:15	12/05/14	Sediment	Same As Above
H14120109-055	SS-15B Sediment Sieve 1-2mm	12/03/14 12:15	12/05/14	Sediment	Same As Above
H14120109-056	SS-16B Sediment Sieve <0.065mm	12/03/14 10:45	12/05/14	Sediment	Same As Above
H14120109-057	SS-16B Sediment Sieve 0.065-1mm	12/03/14 10:45	12/05/14	Sediment	Same As Above
H14120109-058	SS-16B Sediment Sieve 1-2mm	12/03/14 10:45	12/05/14	Sediment	Same As Above
H14120109-059	SS-17D Sediment Sieve <0.065mm	12/03/14 9:45	12/05/14	Sediment	Same As Above
H14120109-060	SS-17D Sediment Sieve 0.065-1mm	12/03/14 9:45	12/05/14	Sediment	Same As Above
H14120109-061	SS-17D Sediment Sieve 1-2mm	12/03/14 9:45	12/05/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14120109-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	11	mg/L		2		A2540 D	12/08/14 14:26 / SR		-124 (14410200)_141208A	3	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	12/09/14 18:30 / SR		PHSC_101-H_141209A	71	R102712
Bicarbonate as HCO3	120	mg/L		4		A2320 B	12/09/14 18:30 / SR		PHSC_101-H_141209A	71	R102712
Chloride	27	mg/L		1		E300.0	12/08/14 20:22 / SR		IC102-H_141208A	64	R102706
Sulfate	93	mg/L		1		E300.0	12/08/14 20:22 / SR		IC102-H_141208A	64	R102706
Hardness as CaCO3	186	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	16	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/08/14 15:54 / cm		FIA203-HE_141208C	46	R102707
Nitrogen, Nitrate+Nitrite as N	1.54	mg/L		0.05		E353.2	12/08/14 11:57 / cm		FIA203-HE_141208A	62	R102687
Nitrogen, Total	1.66	mg/L	D	0.06		A4500 N-C	12/17/14 14:42 / cm	12/16/14 10:35	FIA203-HE_141217B	13	27400
Phosphorus, Total as P	0.092	mg/L		0.005		E365.1	12/08/14 14:53 / cm	12/08/14 13:30	FIA202-HE_141208A	60	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Arsenic	0.003	mg/L		0.001		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Barium	0.044	mg/L		0.003		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:12 / sld		ICP2-HE_141208A	36	R102682
Cadmium	0.00005	mg/L		0.00003		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Calcium	53	mg/L		1		E200.7	12/08/14 12:12 / sld		ICP2-HE_141208A	36	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Copper	0.003	mg/L		0.001		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Iron	0.03	mg/L		0.02		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 12:12 / sld		ICP2-HE_141208A	36	R102682
Manganese	0.117	mg/L		0.001		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/12/14 13:36 / rgk	12/10/14 12:59	HGCV202-H_141212A	17	27352

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14120109-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Potassium	4	mg/L		1		E200.7	12/08/14 12:12 / sld		ICP2-HE_141208A	36	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Sodium	23	mg/L		1		E200.7	12/08/14 12:12 / sld		ICP2-HE_141208A	36	R102682
Uranium	0.0049	mg/L		0.0002		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
Zinc	0.022	mg/L		0.008		E200.8	12/10/14 03:23 / dck		ICPMS204-B_141209B	169	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.260	mg/L		0.009		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Arsenic	0.004	mg/L		0.001		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Barium	0.047	mg/L		0.003		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Cadmium	0.00014	mg/L		0.00003		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Calcium	52	mg/L		1		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Copper	0.012	mg/L		0.001		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Iron	0.58	mg/L		0.02		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Lead	0.0030	mg/L		0.0003		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Manganese	0.151	mg/L		0.001		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Mercury	ND	mg/L		5E-06		E245.1	12/12/14 13:40 / rgk	12/10/14 12:59	HGCV202-H_141212A	18	27352
Molybdenum	0.006	mg/L		0.005		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Potassium	4	mg/L		1		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G
Lab ID: H14120109-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	22	mg/L		1		E200.7	12/09/14 15:02 / sld	12/08/14 09:35	ICP2-HE_141209B	63	27299
Uranium	0.0051	mg/L		0.0002		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299
Zinc	0.041	mg/L		0.008		E200.8	12/10/14 03:51 / dck	12/08/14 09:35	ICPMS204-B_141209B	175	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14120109-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	8	mg/L		1		A2540 D	12/08/14 14:27 / SR		-124 (14410200)_141208A	5	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	12/09/14 18:40 / SR		PHSC_101-H_141209A	75	R102712
Bicarbonate as HCO3	150	mg/L		4		A2320 B	12/09/14 18:40 / SR		PHSC_101-H_141209A	75	R102712
Chloride	35	mg/L		1		E300.0	12/08/14 20:33 / SR		IC102-H_141208A	65	R102706
Sulfate	74	mg/L		1		E300.0	12/08/14 20:33 / SR		IC102-H_141208A	65	R102706
Hardness as CaCO3	164	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	17	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	7.0	mg/L	D	0.2		E350.1	12/12/14 12:16 / cm		FIA203-HE_141212B	13	R102841
Nitrogen, Nitrate+Nitrite as N	1.31	mg/L		0.05		E353.2	12/08/14 11:58 / cm		FIA203-HE_141208A	63	R102687
Nitrogen, Total	8.6	mg/L	D	0.2		A4500 N-C	12/17/14 14:43 / cm	12/16/14 10:35	FIA203-HE_141217B	14	27400
Phosphorus, Total as P	0.378	mg/L		0.005		E365.1	12/08/14 15:39 / cm	12/08/14 13:30	FIA202-HE_141208A	105	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Arsenic	0.003	mg/L		0.001		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Barium	0.038	mg/L		0.003		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:15 / sld		ICP2-HE_141208A	37	R102682
Cadmium	0.00005	mg/L		0.00003		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Calcium	46	mg/L		1		E200.7	12/08/14 12:15 / sld		ICP2-HE_141208A	37	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Copper	0.005	mg/L		0.001		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Iron	0.05	mg/L		0.02		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Magnesium	12	mg/L		1		E200.7	12/08/14 12:15 / sld		ICP2-HE_141208A	37	R102682
Manganese	0.104	mg/L		0.001		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Mercury	0.000013	mg/L		5E-06		E245.1	12/12/14 13:44 / rgk	12/10/14 12:59	HGCV202-H_141212A	19	27352

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14120109-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 12:15 / sld		ICP2-HE_141208A	37	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Sodium	28	mg/L		1		E200.7	12/08/14 12:15 / sld		ICP2-HE_141208A	37	R102682
Uranium	0.0041	mg/L		0.0002		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
Zinc	0.037	mg/L		0.008		E200.8	12/10/14 04:22 / dck		ICPMS204-B_141209B	182	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.169	mg/L		0.009		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Arsenic	0.004	mg/L		0.001		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Barium	0.041	mg/L		0.003		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Cadmium	0.00012	mg/L		0.00003		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Calcium	45	mg/L		1		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Copper	0.012	mg/L		0.001		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Iron	0.39	mg/L		0.02		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Lead	0.0021	mg/L		0.0003		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Magnesium	12	mg/L		1		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Manganese	0.125	mg/L		0.001		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Mercury	ND	mg/L		5E-06		E245.1	12/12/14 13:48 / rgk	12/10/14 12:59	HGCV202-H_141212A	20	27352
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07
Lab ID: H14120109-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	27	mg/L		1		E200.7	12/09/14 15:17 / sld	12/08/14 09:35	ICP2-HE_141209B	67	27299
Uranium	0.0044	mg/L		0.0002		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299
Zinc	0.049	mg/L		0.008		E200.8	12/10/14 04:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	183	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14120109-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	20	mg/L		1		A2540 D	12/08/14 14:27 / SR		-124 (14410200)_141208A	6	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	12/09/14 18:45 / SR		PHSC_101-H_141209A	77	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 18:45 / SR		PHSC_101-H_141209A	77	R102712
Chloride	33	mg/L		1		E300.0	12/08/14 20:44 / SR		IC102-H_141208A	66	R102706
Sulfate	82	mg/L		1		E300.0	12/08/14 20:44 / SR		IC102-H_141208A	66	R102706
Hardness as CaCO3	166	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	18	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	5.0	mg/L	D	0.2		E350.1	12/12/14 12:18 / cm		FIA203-HE_141212B	14	R102841
Nitrogen, Nitrate+Nitrite as N	1.72	mg/L		0.05		E353.2	12/08/14 12:00 / cm		FIA203-HE_141208A	64	R102687
Nitrogen, Total	7.0	mg/L	D	0.2		A4500 N-C	12/17/14 14:45 / cm	12/16/14 10:35	FIA203-HE_141217B	15	27400
Phosphorus, Total as P	0.355	mg/L		0.005		E365.1	12/08/14 15:40 / cm	12/08/14 13:30	FIA202-HE_141208A	106	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Arsenic	0.003	mg/L		0.001		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Barium	0.039	mg/L		0.003		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:19 / sld		ICP2-HE_141208A	38	R102682
Cadmium	0.00009	mg/L		0.00003		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Calcium	48	mg/L		1		E200.7	12/08/14 12:19 / sld		ICP2-HE_141208A	38	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Copper	0.006	mg/L		0.001		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Iron	0.08	mg/L		0.02		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Magnesium	12	mg/L		1		E200.7	12/08/14 12:19 / sld		ICP2-HE_141208A	38	R102682
Manganese	0.206	mg/L		0.001		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Mercury	6.8E-06	mg/L		5E-06		E245.1	12/12/14 13:53 / rgk	12/10/14 12:59	HGCV202-H_141212A	21	27352

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14120109-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 12:19 / sld		ICP2-HE_141208A	38	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Sodium	29	mg/L		1		E200.7	12/08/14 12:19 / sld		ICP2-HE_141208A	38	R102682
Uranium	0.0045	mg/L		0.0002		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
Zinc	0.060	mg/L		0.008		E200.8	12/10/14 04:31 / dck		ICPMS204-B_141209B	184	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.387	mg/L		0.009		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Barium	0.046	mg/L		0.003		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Cadmium	0.00031	mg/L		0.00003		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Calcium	47	mg/L		1		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Copper	0.025	mg/L		0.001		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Iron	0.76	mg/L		0.02		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Lead	0.0059	mg/L		0.0003		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Magnesium	12	mg/L		1		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Manganese	0.244	mg/L		0.001		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Mercury	0.000025	mg/L		5E-06		E245.1	12/12/14 13:57 / rgk	12/10/14 12:59	HGCV202-H_141212A	22	27352
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08
Lab ID: H14120109-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	29	mg/L		1		E200.7	12/09/14 15:28 / sld	12/08/14 09:35	ICP2-HE_141209B	70	27299
Uranium	0.0050	mg/L		0.0002		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299
Zinc	0.102	mg/L		0.008		E200.8	12/10/14 04:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	185	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14120109-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	22	mg/L		1		A2540 D	12/08/14 14:27 / SR		-124 (14410200)_141208A	7	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 18:51 / SR		PHSC_101-H_141209A	79	R102712
Bicarbonate as HCO3	130	mg/L		4		A2320 B	12/09/14 18:51 / SR		PHSC_101-H_141209A	79	R102712
Chloride	31	mg/L		1		E300.0	12/08/14 20:55 / SR		IC102-H_141208A	67	R102706
Sulfate	93	mg/L		1		E300.0	12/08/14 20:55 / SR		IC102-H_141208A	67	R102706
Hardness as CaCO3	182	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	19	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	1.69	mg/L		0.05		E350.1	12/08/14 15:58 / cm		FIA203-HE_141208C	49	R102707
Nitrogen, Nitrate+Nitrite as N	2.29	mg/L		0.05		E353.2	12/08/14 12:37 / cm		FIA203-HE_141208A	95	R102687
Nitrogen, Total	4.8	mg/L	D	0.2		A4500 N-C	12/17/14 14:46 / cm	12/16/14 10:35	FIA203-HE_141217B	16	27400
Phosphorus, Total as P	0.413	mg/L		0.005		E365.1	12/08/14 14:56 / cm	12/08/14 13:30	FIA202-HE_141208A	63	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Arsenic	0.004	mg/L		0.001		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Barium	0.040	mg/L		0.003		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:23 / sld		ICP2-HE_141208A	39	R102682
Cadmium	0.00016	mg/L		0.00003		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Calcium	52	mg/L		1		E200.7	12/08/14 12:23 / sld		ICP2-HE_141208A	39	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Copper	0.012	mg/L		0.001		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Iron	0.06	mg/L		0.02		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 12:23 / sld		ICP2-HE_141208A	39	R102682
Manganese	0.284	mg/L		0.001		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/12/14 14:01 / rgk	12/10/14 12:59	HGCV202-H_141212A	23	27352

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14120109-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Potassium	5	mg/L		1		E200.7	12/08/14 12:23 / sld		ICP2-HE_141208A	39	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Sodium	29	mg/L		1		E200.7	12/08/14 12:23 / sld		ICP2-HE_141208A	39	R102682
Uranium	0.0050	mg/L		0.0002		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
Zinc	0.086	mg/L		0.008		E200.8	12/10/14 04:41 / dck		ICPMS204-B_141209B	186	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.483	mg/L		0.009		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Barium	0.048	mg/L		0.003		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Cadmium	0.00047	mg/L		0.00003		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Calcium	52	mg/L		1		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Copper	0.043	mg/L		0.001		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Iron	0.84	mg/L		0.02		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Lead	0.0065	mg/L		0.0003		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Manganese	0.357	mg/L		0.001		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Mercury	0.000036	mg/L		5E-06		E245.1	12/12/14 14:05 / rgk	12/10/14 12:59	HGCV202-H_141212A	24	27352
Molybdenum	0.006	mg/L		0.005		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A
Lab ID: H14120109-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	29	mg/L		1		E200.7	12/09/14 15:32 / sld	12/08/14 09:35	ICP2-HE_141209B	71	27299
Uranium	0.0056	mg/L		0.0002		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299
Zinc	0.138	mg/L		0.008		E200.8	12/10/14 04:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	187	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14120109-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	20	mg/L		2		A2540 D	12/08/14 14:28 / SR		-124 (14410200)_141208A	8	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 18:56 / SR		PHSC_101-H_141209A	81	R102712
Bicarbonate as HCO3	130	mg/L		4		A2320 B	12/09/14 18:56 / SR		PHSC_101-H_141209A	81	R102712
Chloride	32	mg/L		1		E300.0	12/08/14 21:06 / SR		IC102-H_141208A	68	R102706
Sulfate	93	mg/L		1		E300.0	12/08/14 21:06 / SR		IC102-H_141208A	68	R102706
Hardness as CaCO3	184	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	20	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	1.88	mg/L		0.05		E350.1	12/08/14 15:59 / cm		FIA203-HE_141208C	50	R102707
Nitrogen, Nitrate+Nitrite as N	2.11	mg/L		0.05		E353.2	12/08/14 12:38 / cm		FIA203-HE_141208A	96	R102687
Nitrogen, Total	4.8	mg/L	D	0.2		A4500 N-C	12/17/14 14:47 / cm	12/16/14 10:35	FIA203-HE_141217B	17	27400
Phosphorus, Total as P	0.437	mg/L		0.005		E365.1	12/08/14 14:57 / cm	12/08/14 13:30	FIA202-HE_141208A	64	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Arsenic	0.004	mg/L		0.001		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Barium	0.039	mg/L		0.003		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:27 / sld		ICP2-HE_141208A	40	R102682
Cadmium	0.00015	mg/L		0.00003		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Calcium	53	mg/L		1		E200.7	12/08/14 12:27 / sld		ICP2-HE_141208A	40	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Copper	0.012	mg/L		0.001		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Iron	0.06	mg/L		0.02		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 12:27 / sld		ICP2-HE_141208A	40	R102682
Manganese	0.289	mg/L		0.001		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 14:06 / rgk	12/15/14 11:30	HGCV202-H_141216A	36	27386

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14120109-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 12:27 / sld		ICP2-HE_141208A	40	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Sodium	29	mg/L		1		E200.7	12/08/14 12:27 / sld		ICP2-HE_141208A	40	R102682
Uranium	0.0050	mg/L		0.0002		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
Zinc	0.093	mg/L		0.008		E200.8	12/10/14 04:50 / dck		ICPMS204-B_141209B	188	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.418	mg/L		0.009		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Barium	0.047	mg/L		0.003		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Cadmium	0.00072	mg/L		0.00003		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Calcium	52	mg/L		1		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Copper	0.040	mg/L		0.001		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Iron	0.76	mg/L		0.02		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Lead	0.0057	mg/L		0.0003		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Manganese	0.359	mg/L		0.001		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Mercury	0.000026	mg/L		5E-06		E245.1	12/16/14 14:19 / rgk	12/15/14 11:30	HGCV202-H_141216A	39	27386
Molybdenum	0.006	mg/L		0.005		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B
Lab ID: H14120109-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	29	mg/L		1		E200.7	12/09/14 15:35 / sld	12/08/14 09:35	ICP2-HE_141209B	72	27299
Uranium	0.0055	mg/L		0.0002		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299
Zinc	0.140	mg/L		0.008		E200.8	12/10/14 04:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	189	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14120109-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	20	mg/L		2		A2540 D	12/08/14 14:28 / SR		-124 (14410200)_141208A	9	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	12/09/14 19:01 / SR		PHSC_101-H_141209A	83	R102712
Bicarbonate as HCO3	150	mg/L		4		A2320 B	12/09/14 19:01 / SR		PHSC_101-H_141209A	83	R102712
Chloride	56	mg/L		1		E300.0	12/08/14 21:17 / SR		IC102-H_141208A	69	R102706
Sulfate	100	mg/L		1		E300.0	12/08/14 21:17 / SR		IC102-H_141208A	69	R102706
Hardness as CaCO3	215	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	21	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	3.5	mg/L	D	0.2		E350.1	12/12/14 12:19 / cm		FIA203-HE_141212B	15	R102841
Nitrogen, Nitrate+Nitrite as N	1.81	mg/L		0.05		E353.2	12/08/14 12:03 / cm		FIA203-HE_141208A	67	R102687
Nitrogen, Total	6.0	mg/L	D	0.2		A4500 N-C	12/17/14 14:48 / cm	12/16/14 10:35	FIA203-HE_141217B	18	27400
Phosphorus, Total as P	0.535	mg/L		0.005		E365.1	12/16/14 09:16 / cm	12/16/14 08:44	FIA202-HE_141216A	13	27399
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Barium	0.043	mg/L		0.003		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:30 / sld		ICP2-HE_141208A	41	R102682
Cadmium	0.00016	mg/L		0.00003		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Calcium	65	mg/L		1		E200.7	12/08/14 12:30 / sld		ICP2-HE_141208A	41	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Copper	0.011	mg/L		0.001		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Iron	0.05	mg/L		0.02		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Magnesium	14	mg/L		1		E200.7	12/08/14 12:30 / sld		ICP2-HE_141208A	41	R102682
Manganese	0.346	mg/L		0.001		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 14:23 / rgk	12/15/14 11:30	HGCV202-H_141216A	40	27386

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14120109-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Potassium	7	mg/L		1		E200.7	12/08/14 12:30 / sld		ICP2-HE_141208A	41	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Sodium	34	mg/L		1		E200.7	12/08/14 12:30 / sld		ICP2-HE_141208A	41	R102682
Uranium	0.0054	mg/L		0.0002		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
Zinc	0.138	mg/L		0.008		E200.8	12/10/14 04:59 / dck		ICPMS204-B_141209B	190	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.440	mg/L		0.009		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Arsenic	0.007	mg/L		0.001		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Barium	0.052	mg/L		0.003		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Cadmium	0.00055	mg/L		0.00003		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Calcium	64	mg/L		1		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Copper	0.040	mg/L		0.001		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Iron	0.70	mg/L		0.02		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Lead	0.0054	mg/L		0.0003		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Magnesium	14	mg/L		1		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Manganese	0.434	mg/L		0.001		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Mercury	0.000034	mg/L		5E-06		E245.1	12/16/14 14:28 / rgk	12/15/14 11:30	HGCV202-H_141216A	41	27386
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Potassium	7	mg/L		1		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C
Lab ID: H14120109-006
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	34	mg/L		1		E200.7	12/09/14 15:39 / sld	12/08/14 09:35	ICP2-HE_141209B	73	27299
Uranium	0.0059	mg/L		0.0002		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299
Zinc	0.189	mg/L		0.008		E200.8	12/10/14 05:04 / dck	12/08/14 09:35	ICPMS204-B_141209B	191	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14120109-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	21	mg/L		2		A2540 D	12/08/14 14:28 / SR		I24 (14410200)_141208A	10	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	12/09/14 19:06 / SR		PHSC_101-H_141209A	85	R102712
Bicarbonate as HCO3	150	mg/L		4		A2320 B	12/09/14 19:06 / SR		PHSC_101-H_141209A	85	R102712
Chloride	52	mg/L		1		E300.0	12/08/14 21:28 / SR		IC102-H_141208A	70	R102706
Sulfate	94	mg/L		1		E300.0	12/08/14 21:28 / SR		IC102-H_141208A	70	R102706
Hardness as CaCO3	205	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	22	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	3.2	mg/L	D	0.1		E350.1	12/12/14 12:20 / cm		FIA203-HE_141212B	16	R102841
Nitrogen, Nitrate+Nitrite as N	1.73	mg/L		0.05		E353.2	12/08/14 12:21 / cm		FIA203-HE_141208A	82	R102687
Nitrogen, Total	5.2	mg/L	D	0.2		A4500 N-C	12/17/14 14:49 / cm	12/16/14 10:35	FIA203-HE_141217B	19	27400
Phosphorus, Total as P	0.236	mg/L		0.005		E365.1	12/16/14 09:17 / cm	12/08/14 13:30	FIA202-HE_141216A	14	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Barium	0.042	mg/L		0.003		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 12:34 / sld		ICP2-HE_141208A	42	R102682
Cadmium	0.00015	mg/L		0.00003		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Calcium	62	mg/L		1		E200.7	12/08/14 12:34 / sld		ICP2-HE_141208A	42	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Copper	0.010	mg/L		0.001		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Iron	0.05	mg/L		0.02		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 12:34 / sld		ICP2-HE_141208A	42	R102682
Manganese	0.323	mg/L		0.001		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 14:32 / rgk	12/15/14 11:30	HGCV202-H_141216A	42	27386

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14120109-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Potassium	7	mg/L		1		E200.7	12/08/14 12:34 / sld		ICP2-HE_141208A	42	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Sodium	34	mg/L		1		E200.7	12/08/14 12:34 / sld		ICP2-HE_141208A	42	R102682
Uranium	0.0052	mg/L		0.0002		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
Zinc	0.128	mg/L		0.008		E200.8	12/10/14 05:22 / dck		ICPMS204-B_141209B	195	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.492	mg/L		0.009		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Arsenic	0.007	mg/L		0.001		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Barium	0.050	mg/L		0.003		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Cadmium	0.00051	mg/L		0.00003		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Calcium	61	mg/L		1		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Copper	0.039	mg/L		0.001		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Iron	0.75	mg/L		0.02		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Lead	0.0054	mg/L		0.0003		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Manganese	0.417	mg/L		0.001		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Mercury	0.000028	mg/L		5E-06		E245.1	12/16/14 14:36 / rgk	12/15/14 11:30	HGCV202-H_141216A	43	27386
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Potassium	7	mg/L		1		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D
Lab ID: H14120109-007
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	33	mg/L		1		E200.7	12/09/14 15:43 / sld	12/08/14 09:35	ICP2-HE_141209B	74	27299
Uranium	0.0056	mg/L		0.0002		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299
Zinc	0.177	mg/L		0.008		E200.8	12/10/14 05:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	196	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14120109-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 16:30
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	12/08/14 14:29 / SR		I24 (14410200)_141208A	11	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	12/09/14 19:11 / SR		PHSC_101-H_141209A	87	R102712
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	12/09/14 19:11 / SR		PHSC_101-H_141209A	87	R102712
Chloride	ND	mg/L		1		E300.0	12/08/14 21:39 / SR		IC102-H_141208A	71	R102706
Sulfate	ND	mg/L		1		E300.0	12/08/14 21:39 / SR		IC102-H_141208A	71	R102706
Hardness as CaCO3	ND	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	23	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/12/14 12:21 / cm		FIA203-HE_141212B	17	R102841
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	12/08/14 12:10 / cm		FIA203-HE_141208A	73	R102687
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	12/17/14 14:51 / cm	12/16/14 10:35	FIA203-HE_141217B	20	27400
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	12/08/14 15:00 / cm	12/08/14 13:30	FIA202-HE_141208A	67	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Arsenic	ND	mg/L		0.001		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Barium	ND	mg/L		0.003		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:23 / sld		ICP2-HE_141208A	55	R102682
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Calcium	ND	mg/L		1		E200.7	12/08/14 13:23 / sld		ICP2-HE_141208A	55	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Copper	ND	mg/L		0.001		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Iron	ND	mg/L		0.02		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Magnesium	ND	mg/L		1		E200.7	12/08/14 13:23 / sld		ICP2-HE_141208A	55	R102682
Manganese	ND	mg/L		0.001		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 14:40 / rgk	12/15/14 11:30	HGCV202-H_141216A	44	27386

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14120109-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 16:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Potassium	ND	mg/L		1		E200.7	12/08/14 13:23 / sld		ICP2-HE_141208A	55	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Sodium	ND	mg/L		1		E200.7	12/08/14 13:23 / sld		ICP2-HE_141208A	55	R102682
Uranium	ND	mg/L		0.0002		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
Zinc	0.009	mg/L		0.008		E200.8	12/10/14 05:31 / dck		ICPMS204-B_141209B	197	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Arsenic	ND	mg/L		0.001		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Barium	ND	mg/L		0.003		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Calcium	ND	mg/L		1		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Copper	ND	mg/L		0.001		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Iron	ND	mg/L		0.02		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Lead	ND	mg/L		0.0003		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Magnesium	ND	mg/L		1		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Manganese	ND	mg/L		0.001		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 14:44 / rgk	12/15/14 11:30	HGCV202-H_141216A	45	27386
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Potassium	ND	mg/L		1		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: Field Blank #1
Lab ID: H14120109-008
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 16:30
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	ND	mg/L		1		E200.7	12/09/14 15:47 / sld	12/08/14 09:35	ICP2-HE_141209B	75	27299
Uranium	ND	mg/L		0.0002		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299
Zinc	ND	mg/L		0.008		E200.8	12/10/14 05:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	198	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14120109-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	50	mg/L		2		A2540 D	12/08/14 14:29 / SR		I24 (14410200)_141208A	12	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 19:16 / SR		PHSC_101-H_141209A	89	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:16 / SR		PHSC_101-H_141209A	89	R102712
Chloride	48	mg/L		1		E300.0	12/08/14 21:51 / SR		IC102-H_141208A	72	R102706
Sulfate	98	mg/L		1		E300.0	12/08/14 21:51 / SR		IC102-H_141208A	72	R102706
Hardness as CaCO3	206	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	24	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	1.45	mg/L		0.05		E350.1	12/12/14 12:25 / cm		FIA203-HE_141212B	20	R102841
Nitrogen, Nitrate+Nitrite as N	1.69	mg/L		0.05		E353.2	12/08/14 12:12 / cm		FIA203-HE_141208A	74	R102687
Nitrogen, Total	4.6	mg/L	D	0.2		A4500 N-C	12/17/14 14:54 / cm	12/16/14 10:35	FIA203-HE_141217B	23	27400
Phosphorus, Total as P	0.477	mg/L		0.005		E365.1	12/08/14 15:01 / cm	12/08/14 13:30	FIA202-HE_141208A	68	27311
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Barium	0.040	mg/L		0.003		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:27 / sld		ICP2-HE_141208A	56	R102682
Cadmium	0.00010	mg/L		0.00003		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Calcium	63	mg/L		1		E200.7	12/08/14 13:27 / sld		ICP2-HE_141208A	56	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Copper	0.008	mg/L		0.001		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Iron	0.05	mg/L		0.02		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Magnesium	14	mg/L		1		E200.7	12/08/14 13:27 / sld		ICP2-HE_141208A	56	R102682
Manganese	0.342	mg/L		0.001		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 14:49 / rgk	12/15/14 11:30	HGCV202-H_141216A	46	27386

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14120109-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 13:27 / sld		ICP2-HE_141208A	56	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Sodium	32	mg/L		1		E200.7	12/08/14 13:27 / sld		ICP2-HE_141208A	56	R102682
Uranium	0.0054	mg/L		0.0002		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
Zinc	0.108	mg/L		0.008		E200.8	12/10/14 05:41 / dck		ICPMS204-B_141209B	199	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	1.14	mg/L		0.009		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Arsenic	0.008	mg/L		0.001		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Barium	0.061	mg/L		0.003		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Cadmium	0.00090	mg/L	D	0.00005		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Calcium	61	mg/L		1		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Copper	0.071	mg/L		0.001		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Iron	1.64	mg/L		0.02		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Lead	0.0120	mg/L		0.0003		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Manganese	0.584	mg/L		0.001		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Mercury	0.000086	mg/L		5E-06		E245.1	12/16/14 14:53 / rgk	12/15/14 11:30	HGCV202-H_141216A	47	27386
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13
Lab ID: H14120109-009
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	32	mg/L		1		E200.7	12/09/14 15:51 / sld	12/08/14 09:35	ICP2-HE_141209B	76	27299
Uranium	0.0060	mg/L		0.0002		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299
Zinc	0.236	mg/L		0.008		E200.8	12/10/14 05:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	200	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Duplicate
Lab ID: H14120109-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	49	mg/L		2		A2540 D	12/08/14 14:29 / SR		I24 (14410200)_141208A	13	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 19:21 / SR		PHSC_101-H_141209A	91	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:21 / SR		PHSC_101-H_141209A	91	R102712
Chloride	49	mg/L		1		E300.0	12/08/14 22:24 / SR		IC102-H_141208A	75	R102706
Sulfate	99	mg/L		1		E300.0	12/08/14 22:24 / SR		IC102-H_141208A	75	R102706
Hardness as CaCO3	204	mg/L		1		A2340 B	12/15/14 10:16 / sld		WATERCALC_141215A	1	R102851
NUTRIENTS											
Nitrogen, Ammonia as N	1.51	mg/L		0.05		E350.1	12/12/14 12:26 / cm		FIA203-HE_141212B	21	R102841
Nitrogen, Nitrate+Nitrite as N	1.68	mg/L		0.05		E353.2	12/08/14 12:13 / cm		FIA203-HE_141208A	75	R102687
Nitrogen, Total	4.6	mg/L	D	0.2		A4500 N-C	12/17/14 14:55 / cm	12/16/14 10:35	FIA203-HE_141217B	24	27400
Phosphorus, Total as P	0.481	mg/L		0.005		E365.1	12/08/14 15:19 / cm	12/08/14 13:31	FIA202-HE_141208A	85	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Barium	0.042	mg/L		0.003		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:30 / sld		ICP2-HE_141208A	57	R102682
Cadmium	0.00010	mg/L		0.00003		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Calcium	63	mg/L		1		E200.7	12/08/14 13:30 / sld		ICP2-HE_141208A	57	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Copper	0.008	mg/L		0.001		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Iron	0.05	mg/L		0.02		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Magnesium	14	mg/L		1		E200.7	12/08/14 13:30 / sld		ICP2-HE_141208A	57	R102682
Manganese	0.333	mg/L		0.001		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:10 / rgk	12/11/14 11:37	HGCV202-H_141215A	13	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Duplicate
Lab ID: H14120109-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 13:30 / sld		ICP2-HE_141208A	57	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Sodium	32	mg/L		1		E200.7	12/08/14 13:30 / sld		ICP2-HE_141208A	57	R102682
Uranium	0.0053	mg/L		0.0002		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
Zinc	0.107	mg/L		0.008		E200.8	12/10/14 05:50 / dck		ICPMS204-B_141209B	201	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	1.03	mg/L		0.009		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Arsenic	0.008	mg/L		0.001		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Barium	0.058	mg/L		0.003		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Cadmium	0.00086	mg/L	D	0.00005		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Calcium	60	mg/L		1		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Copper	0.068	mg/L		0.001		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Iron	1.52	mg/L		0.02		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Lead	0.0111	mg/L		0.0003		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Manganese	0.555	mg/L		0.001		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Mercury	0.000055	mg/L		5E-06		E245.1	12/15/14 15:23 / rgk	12/11/14 11:37	HGCV202-H_141215A	16	27357
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Silver	ND	mg/L		0.0002		E200.8	12/11/14 22:53 / dck	12/08/14 09:35	ICPMS204-B_141211B	54	27299

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Duplicate
Lab ID: H14120109-010
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	31	mg/L		1		E200.7	12/09/14 15:54 / sld	12/08/14 09:35	ICP2-HE_141209B	77	27299
Uranium	0.0059	mg/L		0.0002		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299
Zinc	0.231	mg/L		0.008		E200.8	12/10/14 06:18 / dck	12/08/14 09:35	ICPMS204-B_141209B	207	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14120109-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	78	mg/L		2		A2540 D	12/08/14 14:29 / SR		I24 (14410200)_141208A	14	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 19:27 / SR		PHSC_101-H_141209A	93	R102712
Bicarbonate as HCO3	130	mg/L		4		A2320 B	12/09/14 19:27 / SR		PHSC_101-H_141209A	93	R102712
Chloride	48	mg/L		1		E300.0	12/08/14 22:57 / SR		IC102-H_141208A	78	R102706
Sulfate	99	mg/L		1		E300.0	12/08/14 22:57 / SR		IC102-H_141208A	78	R102706
Hardness as CaCO3	208	mg/L		1		A2340 B	12/15/14 10:16 / sld		WATERCALC_141215A	2	R102851
NUTRIENTS											
Nitrogen, Ammonia as N	1.52	mg/L		0.05		E350.1	12/12/14 12:27 / cm		FIA203-HE_141212B	22	R102841
Nitrogen, Nitrate+Nitrite as N	1.61	mg/L		0.05		E353.2	12/08/14 12:14 / cm		FIA203-HE_141208A	76	R102687
Nitrogen, Total	4.5	mg/L	D	0.2		A4500 N-C	12/17/14 14:59 / cm	12/16/14 10:35	FIA203-HE_141217B	27	27400
Phosphorus, Total as P	0.648	mg/L		0.005		E365.1	12/16/14 09:18 / cm	12/16/14 08:44	FIA202-HE_141216A	15	27399
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Barium	0.040	mg/L		0.003		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:34 / sld		ICP2-HE_141208A	58	R102682
Cadmium	0.00012	mg/L		0.00003		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Calcium	62	mg/L		1		E200.7	12/08/14 13:34 / sld		ICP2-HE_141208A	58	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Copper	0.008	mg/L		0.001		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Iron	0.04	mg/L		0.02		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Magnesium	14	mg/L		1		E200.7	12/08/14 13:34 / sld		ICP2-HE_141208A	58	R102682
Manganese	0.383	mg/L		0.001		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:27 / rgk	12/11/14 11:37	HGCV202-H_141215A	17	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14120109-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 13:34 / sld		ICP2-HE_141208A	58	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Sodium	32	mg/L		1		E200.7	12/08/14 13:34 / sld		ICP2-HE_141208A	58	R102682
Uranium	0.0054	mg/L		0.0002		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
Zinc	0.101	mg/L		0.008		E200.8	12/10/14 06:22 / dck		ICPMS204-B_141209B	208	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	1.75	mg/L		0.009		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Arsenic	0.009	mg/L		0.001		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Barium	0.074	mg/L		0.003		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Cadmium	0.00119	mg/L	D	0.00005		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Calcium	61	mg/L		1		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Copper	0.098	mg/L		0.001		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Iron	2.38	mg/L		0.02		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Lead	0.0178	mg/L		0.0003		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Magnesium	14	mg/L		1		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Manganese	0.763	mg/L		0.001		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Mercury	0.00036	mg/L		5E-06		E245.1	12/15/14 15:31 / rgk	12/11/14 11:37	HGCV202-H_141215A	18	27357
Molybdenum	0.005	mg/L		0.005		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Potassium	6	mg/L		1		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Silver	0.0002	mg/L		0.0002		E200.8	12/11/14 22:57 / dck	12/08/14 09:35	ICPMS204-B_141211B	55	27299

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14
Lab ID: H14120109-011
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	32	mg/L		1		E200.7	12/09/14 15:58 / sld	12/08/14 09:35	ICP2-HE_141209B	78	27299
Uranium	0.0063	mg/L		0.0002		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299
Zinc	0.302	mg/L		0.008		E200.8	12/10/14 06:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	209	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14120109-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	12/08/14 14:30 / SR		I24 (14410200)_141208A	16	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	12/09/14 19:32 / SR		PHSC_101-H_141209A	95	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:32 / SR		PHSC_101-H_141209A	95	R102712
Chloride	48	mg/L		1		E300.0	12/08/14 23:08 / SR		IC102-H_141208A	79	R102706
Sulfate	96	mg/L		1		E300.0	12/08/14 23:08 / SR		IC102-H_141208A	79	R102706
Hardness as CaCO3	208	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	25	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	2.7	mg/L	D	0.1		E350.1	12/12/14 12:28 / cm		FIA203-HE_141212B	23	R102841
Nitrogen, Nitrate+Nitrite as N	1.79	mg/L		0.05		E353.2	12/08/14 12:15 / cm		FIA203-HE_141208A	77	R102687
Nitrogen, Total	5.2	mg/L	D	0.2		A4500 N-C	12/17/14 15:00 / cm	12/16/14 10:35	FIA203-HE_141217B	28	27400
Phosphorus, Total as P	0.351	mg/L		0.005		E365.1	12/08/14 15:10 / cm	12/08/14 13:31	FIA202-HE_141208A	77	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Barium	0.039	mg/L		0.003		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:38 / sld		ICP2-HE_141208A	59	R102682
Cadmium	0.00021	mg/L		0.00003		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Calcium	61	mg/L		1		E200.7	12/08/14 13:38 / sld		ICP2-HE_141208A	59	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Copper	0.010	mg/L		0.001		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Iron	0.04	mg/L		0.02		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 13:38 / sld		ICP2-HE_141208A	59	R102682
Manganese	0.248	mg/L		0.001		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:35 / rgk	12/11/14 11:37	HGCV202-H_141215A	19	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14120109-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Potassium	6	mg/L		1		E200.7	12/08/14 13:38 / sld		ICP2-HE_141208A	59	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Sodium	32	mg/L		1		E200.7	12/08/14 13:38 / sld		ICP2-HE_141208A	59	R102682
Uranium	0.0053	mg/L		0.0002		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
Zinc	0.124	mg/L		0.008		E200.8	12/10/14 06:49 / dck		ICPMS204-B_141209B	214	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.110	mg/L		0.009		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Antimony	0.0014	mg/L		0.0005		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Barium	0.041	mg/L		0.003		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Cadmium	0.00031	mg/L		0.00003		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Calcium	61	mg/L		1		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Copper	0.018	mg/L		0.001		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Iron	0.29	mg/L		0.02		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Lead	0.0015	mg/L		0.0003		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Magnesium	13	mg/L		1		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Manganese	0.280	mg/L		0.001		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:40 / rgk	12/11/14 11:37	HGCV202-H_141215A	20	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Potassium	6	mg/L		1		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A
Lab ID: H14120109-012
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	33	mg/L		1		E200.7	12/09/14 16:21 / sld	12/08/14 09:35	ICP2-HE_141209B	84	27299
Uranium	0.0056	mg/L		0.0002		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299
Zinc	0.139	mg/L		0.008		E200.8	12/10/14 06:54 / dck	12/08/14 09:35	ICPMS204-B_141209B	215	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14120109-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	3	mg/L		1		A2540 D	12/08/14 14:30 / SR		I24 (14410200)_141208A	17	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 19:37 / SR		PHSC_101-H_141209A	97	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:37 / SR		PHSC_101-H_141209A	97	R102712
Chloride	34	mg/L		1		E300.0	12/08/14 23:19 / SR		IC102-H_141208A	80	R102706
Sulfate	76	mg/L		1		E300.0	12/08/14 23:19 / SR		IC102-H_141208A	80	R102706
Hardness as CaCO3	180	mg/L		1		A2340 B	12/10/14 09:55 / sld		WATERCALC_141210B	26	R102749
NUTRIENTS											
Nitrogen, Ammonia as N	1.6	mg/L	D	0.1		E350.1	12/12/14 12:46 / cm		FIA203-HE_141212B	38	R102841
Nitrogen, Nitrate+Nitrite as N	1.36	mg/L		0.05		E353.2	12/08/14 12:16 / cm		FIA203-HE_141208A	78	R102687
Nitrogen, Total	3.7	mg/L	D	0.2		A4500 N-C	12/17/14 15:01 / cm	12/16/14 10:35	FIA203-HE_141217B	29	27400
Phosphorus, Total as P	0.286	mg/L		0.005		E365.1	12/08/14 15:11 / cm	12/08/14 13:31	FIA202-HE_141208A	78	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Barium	0.033	mg/L		0.003		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:41 / sld		ICP2-HE_141208A	60	R102682
Cadmium	0.00015	mg/L		0.00003		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Calcium	54	mg/L		1		E200.7	12/08/14 13:41 / sld		ICP2-HE_141208A	60	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Copper	0.008	mg/L		0.001		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Iron	0.03	mg/L		0.02		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Magnesium	12	mg/L		1		E200.7	12/08/14 13:41 / sld		ICP2-HE_141208A	60	R102682
Manganese	0.181	mg/L		0.001		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:44 / rgk	12/11/14 11:37	HGCV202-H_141215A	21	27357

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14120109-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Potassium	5	mg/L		1		E200.7	12/08/14 13:41 / sld		ICP2-HE_141208A	60	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Sodium	25	mg/L		1		E200.7	12/08/14 13:41 / sld		ICP2-HE_141208A	60	R102682
Uranium	0.0040	mg/L		0.0002		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
Zinc	0.090	mg/L		0.008		E200.8	12/10/14 06:59 / dck		ICPMS204-B_141209B	216	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.078	mg/L		0.009		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Arsenic	0.005	mg/L		0.001		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Barium	0.034	mg/L		0.003		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Cadmium	0.00021	mg/L		0.00003		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Calcium	53	mg/L		1		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Copper	0.012	mg/L		0.001		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Iron	0.16	mg/L		0.02		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Lead	0.0009	mg/L		0.0003		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Magnesium	11	mg/L		1		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Manganese	0.199	mg/L		0.001		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:48 / rgk	12/11/14 11:37	HGCV202-H_141215A	22	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Potassium	5	mg/L		1		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B
Lab ID: H14120109-013
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	25	mg/L		1		E200.7	12/09/14 16:24 / sld	12/08/14 09:35	ICP2-HE_141209B	85	27299
Uranium	0.0042	mg/L		0.0002		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299
Zinc	0.096	mg/L		0.008		E200.8	12/10/14 07:03 / dck	12/08/14 09:35	ICPMS204-B_141209B	217	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14120109-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	3	mg/L		1		A2540 D	12/08/14 14:31 / SR		I24 (14410200)_141208A	18	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 19:43 / SR		PHSC_101-H_141209A	99	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:43 / SR		PHSC_101-H_141209A	99	R102712
Chloride	36	mg/L		1		E300.0	12/08/14 23:31 / SR		IC102-H_141208A	81	R102706
Sulfate	78	mg/L		1		E300.0	12/08/14 23:31 / SR		IC102-H_141208A	81	R102706
Hardness as CaCO3	185	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	2	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	1.32	mg/L		0.05		E350.1	12/12/14 12:35 / cm		FIA203-HE_141212B	29	R102841
Nitrogen, Nitrate+Nitrite as N	1.48	mg/L		0.05		E353.2	12/08/14 12:17 / cm		FIA203-HE_141208A	79	R102687
Nitrogen, Total	3.7	mg/L	D	0.2		A4500 N-C	12/17/14 15:03 / cm	12/16/14 10:35	FIA203-HE_141217B	30	27400
Phosphorus, Total as P	0.225	mg/L		0.005		E365.1	12/08/14 15:12 / cm	12/08/14 13:31	FIA202-HE_141208A	79	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Barium	0.035	mg/L		0.003		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:45 / sld		ICP2-HE_141208A	61	R102682
Cadmium	0.00040	mg/L		0.00003		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Calcium	55	mg/L		1		E200.7	12/08/14 13:45 / sld		ICP2-HE_141208A	61	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Copper	0.016	mg/L		0.001		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Iron	0.03	mg/L		0.02		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Magnesium	12	mg/L		1		E200.7	12/08/14 13:45 / sld		ICP2-HE_141208A	61	R102682
Manganese	0.171	mg/L		0.001		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:52 / rgk	12/11/14 11:37	HGCV202-H_141215A	23	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14120109-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Potassium	5	mg/L		1		E200.7	12/08/14 13:45 / sld		ICP2-HE_141208A	61	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Sodium	26	mg/L		1		E200.7	12/08/14 13:45 / sld		ICP2-HE_141208A	61	R102682
Uranium	0.0042	mg/L		0.0002		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
Zinc	0.124	mg/L		0.008		E200.8	12/10/14 07:08 / dck		ICPMS204-B_141209B	218	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.101	mg/L		0.009		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Arsenic	0.007	mg/L		0.001		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Barium	0.036	mg/L		0.003		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Cadmium	0.00044	mg/L		0.00003		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Calcium	55	mg/L		1		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Copper	0.023	mg/L		0.001		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Iron	0.19	mg/L		0.02		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Lead	0.0014	mg/L		0.0003		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Magnesium	12	mg/L		1		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Manganese	0.186	mg/L		0.001		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 15:56 / rgk	12/11/14 11:37	HGCV202-H_141215A	24	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Potassium	5	mg/L		1		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B
Lab ID: H14120109-014
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	26	mg/L		1		E200.7	12/09/14 16:28 / sld	12/08/14 09:35	ICP2-HE_141209B	86	27299
Uranium	0.0044	mg/L		0.0002		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299
Zinc	0.131	mg/L		0.008		E200.8	12/10/14 07:27 / dck	12/08/14 09:35	ICPMS204-B_141209B	222	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14120109-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	3	mg/L		1		A2540 D	12/08/14 14:31 / SR		I24 (14410200)_141208A	19	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/09/14 19:48 / SR		PHSC_101-H_141209A	101	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:48 / SR		PHSC_101-H_141209A	101	R102712
Chloride	36	mg/L		1		E300.0	12/08/14 23:42 / SR		IC102-H_141208A	82	R102706
Sulfate	89	mg/L		1		E300.0	12/08/14 23:42 / SR		IC102-H_141208A	82	R102706
Hardness as CaCO3	194	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	3	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	1.03	mg/L		0.05		E350.1	12/12/14 12:37 / cm		FIA203-HE_141212B	30	R102841
Nitrogen, Nitrate+Nitrite as N	1.43	mg/L		0.05		E353.2	12/08/14 12:19 / cm		FIA203-HE_141208A	80	R102687
Nitrogen, Total	3.1	mg/L	D	0.2		A4500 N-C	12/17/14 15:04 / cm	12/16/14 10:35	FIA203-HE_141217B	31	27400
Phosphorus, Total as P	0.198	mg/L		0.005		E365.1	12/08/14 15:13 / cm	12/08/14 13:31	FIA202-HE_141208A	80	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Barium	0.035	mg/L		0.003		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 13:49 / sld		ICP2-HE_141208A	62	R102682
Cadmium	0.00045	mg/L		0.00003		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Calcium	58	mg/L		1		E200.7	12/08/14 13:49 / sld		ICP2-HE_141208A	62	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Copper	0.017	mg/L		0.001		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Iron	0.04	mg/L		0.02		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 13:49 / sld		ICP2-HE_141208A	62	R102682
Manganese	0.133	mg/L		0.001		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:09 / rgk	12/11/14 11:37	HGCV202-H_141215A	27	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14120109-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Potassium	5	mg/L		1		E200.7	12/08/14 13:49 / sld		ICP2-HE_141208A	62	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Sodium	27	mg/L		1		E200.7	12/08/14 13:49 / sld		ICP2-HE_141208A	62	R102682
Uranium	0.0043	mg/L		0.0002		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
Zinc	0.141	mg/L		0.008		E200.8	12/10/14 07:31 / dck		ICPMS204-B_141209B	223	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.096	mg/L		0.009		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Arsenic	0.007	mg/L		0.001		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Barium	0.035	mg/L		0.003		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Cadmium	0.00049	mg/L		0.00003		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Calcium	58	mg/L		1		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Copper	0.023	mg/L		0.001		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Iron	0.19	mg/L		0.02		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Lead	0.0012	mg/L		0.0003		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Magnesium	12	mg/L		1		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Manganese	0.148	mg/L		0.001		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:13 / rgk	12/11/14 11:37	HGCV202-H_141215A	28	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Potassium	5	mg/L		1		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D
Lab ID: H14120109-015
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	27	mg/L		1		E200.7	12/09/14 16:32 / sld	12/08/14 09:35	ICP2-HE_141209B	87	27299
Uranium	0.0046	mg/L		0.0002		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299
Zinc	0.146	mg/L		0.008		E200.8	12/10/14 07:36 / dck	12/08/14 09:35	ICPMS204-B_141209B	224	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14120109-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	4	mg/L		1		A2540 D	12/08/14 14:31 / SR		I24 (14410200)_141208A	20	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	120	mg/L		4		A2320 B	12/09/14 19:53 / SR		PHSC_101-H_141209A	103	R102712
Bicarbonate as HCO3	140	mg/L		4		A2320 B	12/09/14 19:53 / SR		PHSC_101-H_141209A	103	R102712
Chloride	35	mg/L		1		E300.0	12/08/14 23:53 / SR		IC102-H_141208A	83	R102706
Sulfate	90	mg/L		1		E300.0	12/08/14 23:53 / SR		IC102-H_141208A	83	R102706
Hardness as CaCO3	194	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	4	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	0.96	mg/L		0.05		E350.1	12/08/14 16:19 / cm		FIA203-HE_141208C	67	R102707
Nitrogen, Nitrate+Nitrite as N	1.38	mg/L		0.05		E353.2	12/08/14 12:20 / cm		FIA203-HE_141208A	81	R102687
Nitrogen, Total	2.87	mg/L	D	0.06		A4500 N-C	12/17/14 15:05 / cm	12/16/14 10:35	FIA203-HE_141217B	32	27400
Phosphorus, Total as P	0.191	mg/L		0.005		E365.1	12/08/14 15:15 / cm	12/08/14 13:31	FIA202-HE_141208A	81	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Barium	0.037	mg/L		0.003		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Boron	ND	mg/L		0.1		E200.7	12/08/14 14:00 / sld		ICP2-HE_141208A	65	R102682
Cadmium	0.00042	mg/L		0.00003		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Calcium	58	mg/L		1		E200.7	12/08/14 14:00 / sld		ICP2-HE_141208A	65	R102682
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Copper	0.016	mg/L		0.001		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Iron	0.03	mg/L		0.02		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Lead	ND	mg/L		0.0003		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Magnesium	13	mg/L		1		E200.7	12/08/14 14:00 / sld		ICP2-HE_141208A	65	R102682
Manganese	0.120	mg/L		0.001		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:18 / rgk	12/11/14 11:37	HGCV202-H_141215A	29	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14120109-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Potassium	5	mg/L		1		E200.7	12/08/14 14:00 / sld		ICP2-HE_141208A	65	R102682
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Sodium	28	mg/L		1		E200.7	12/08/14 14:00 / sld		ICP2-HE_141208A	65	R102682
Uranium	0.0047	mg/L		0.0002		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
Zinc	0.140	mg/L		0.008		E200.8	12/10/14 07:40 / dck		ICPMS204-B_141209B	225	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.110	mg/L		0.009		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Arsenic	0.006	mg/L		0.001		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Barium	0.037	mg/L		0.003		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Boron	ND	mg/L		0.1		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Cadmium	0.00047	mg/L		0.00003		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Calcium	58	mg/L		1		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Copper	0.022	mg/L		0.001		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Iron	0.19	mg/L		0.02		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Lead	0.0011	mg/L		0.0003		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Magnesium	12	mg/L		1		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Manganese	0.135	mg/L		0.001		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:22 / rgk	12/11/14 11:37	HGCV202-H_141215A	30	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Potassium	5	mg/L		1		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-19
Lab ID: H14120109-016
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	28	mg/L		1		E200.7	12/09/14 16:36 / sld	12/08/14 09:35	ICP2-HE_141209B	88	27299
Uranium	0.0050	mg/L		0.0002		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299
Zinc	0.144	mg/L		0.008		E200.8	12/10/14 07:45 / dck	12/08/14 09:35	ICPMS204-B_141209B	226	27299

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Lab ID: H14120109-017
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.5	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	1	R103020
PHYSICAL CHARACTERISTICS											
Moisture	66.1	wt%		0.2		D2974	12/22/14 10:49 / edp		DRYING OVEN 2_141219A	8	R103021
3050 EXTRACTABLE METALS											
Aluminum	7840	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Antimony	ND	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Arsenic	46	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Barium	235	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Boron	ND	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Cadmium	4.6	mg/kg		0.2		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Chromium	124	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Cobalt	9	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Copper	373	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Iron	14900	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Lead	196	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Manganese	4590	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Molybdenum	9	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Nickel	72	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Selenium	ND	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Silver	ND	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Uranium	ND	mg/kg		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	80	27432
Vanadium	58	mg/kg		1		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
Zinc	954	mg/kg		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	78	27432
METALS, TOTAL											
Mercury	0.36	mg/kg		0.10		SW7471B	12/19/14 15:48 / rgk	12/17/14 08:11	HGCV201-H_141219A	13	27412
METAL, DRY WEIGHT											
Aluminum	23100	mg/kg-dry		10		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve <0.065mm
Lab ID: H14120109-017
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Arsenic	137	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Barium	691	mg/kg-dry		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Boron	ND	mg/kg-dry		10		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Cadmium	13.7	mg/kg-dry		0.5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Chromium	366	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Cobalt	27	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Copper	1100	mg/kg-dry		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Iron	43900	mg/kg-dry		9		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Lead	578	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Manganese	13500	mg/kg-dry		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Molybdenum	26	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Nickel	213	mg/kg-dry		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Silver	6	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Uranium	8	mg/kg-dry		5		SW6020	12/24/14 22:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	249	27432
Vanadium	171	mg/kg-dry		2		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Zinc	2810	mg/kg-dry		5		SW6010B	12/24/14 19:16 / sld	12/18/14 09:55	ICP2-HE_141224B	142	27432
Mercury	1.1	mg/kg-dry		0.10		SW7471B	12/19/14 15:48 / rgk	12/17/14 08:11	HGCV201-H_141219A	85	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Lab ID: H14120109-018
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	23.0	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	2	R103020
PHYSICAL CHARACTERISTICS											
Moisture	15.8	wt%		0.2		D2974	12/22/14 10:49 / edp		DRYING OVEN 2_141219A	9	R103021
3050 EXTRACTABLE METALS											
Aluminum	3250	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Arsenic	21	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Barium	78	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Cadmium	0.6	mg/kg		0.2		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Chromium	6	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Copper	91	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Iron	6850	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Lead	40	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Manganese	1050	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	23	27433
Vanadium	18	mg/kg		1		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
Zinc	254	mg/kg		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	38	27433
METALS, TOTAL											
Mercury	0.11	mg/kg		0.10		SW7471B	12/19/14 15:50 / rgk	12/17/14 08:11	HGCV201-H_141219A	14	27412
METAL, DRY WEIGHT											
Aluminum	3860	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-06G Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Lab ID: H14120109-018
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Arsenic	25	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Barium	93	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Cadmium	0.8	mg/kg-dry		0.2		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Chromium	7	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Copper	108	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Iron	8130	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Lead	48	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Manganese	1250	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Nickel	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 18:16 / sld	12/18/14 09:57	ICPMS204-B_141224B	192	27433
Vanadium	22	mg/kg-dry		1		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Zinc	302	mg/kg-dry		5		SW6010B	12/23/14 15:15 / sld	12/18/14 09:57	ICP2-HE_141223B	74	27433
Mercury	0.13	mg/kg-dry		0.10		SW7471B	12/19/14 15:50 / rgk	12/17/14 08:11	HGCV201-H_141219A	86	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14120109-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	59.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	3	R103020
PHYSICAL CHARACTERISTICS											
Moisture	10.6	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	10	R103021
3050 EXTRACTABLE METALS											
Aluminum	2540	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Arsenic	12	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Barium	57	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Cadmium	0.5	mg/kg		0.2		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Copper	43	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Iron	5650	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Lead	55	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Manganese	861	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	136	27434
Vanadium	16	mg/kg		1		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
Zinc	198	mg/kg		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	106	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/19/14 16:00 / rgk	12/17/14 08:11	HGCV201-H_141219A	18	27412
METAL, DRY WEIGHT											
Aluminum	2840	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-06G Sediment Sieve 1-2mm
Lab ID: H14120109-019
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Arsenic	14	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Barium	64	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Cadmium	0.6	mg/kg-dry		0.2		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Chromium	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Copper	48	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Iron	6320	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Lead	62	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Manganese	963	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 03:15 / sld	12/18/14 09:58	ICPMS204-B_141224B	305	27434
Vanadium	18	mg/kg-dry		1		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Zinc	221	mg/kg-dry		5		SW6010B	12/24/14 21:00 / sld	12/18/14 09:58	ICP2-HE_141224B	167	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/19/14 16:00 / rgk	12/17/14 08:11	HGCV201-H_141219A	90	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Lab ID: H14120109-020
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.6	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	4	R103020
PHYSICAL CHARACTERISTICS											
Moisture	80.4	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	11	R103021
3050 EXTRACTABLE METALS											
Aluminum	6580	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Arsenic	40	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Barium	130	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Cadmium	2.8	mg/kg		0.2		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Chromium	48	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Copper	334	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Iron	13000	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Lead	133	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Manganese	1090	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Molybdenum	9	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Nickel	24	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	102	27432
Vanadium	34	mg/kg		1		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
Zinc	1000	mg/kg		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	79	27432
METALS, TOTAL											
Mercury	0.24	mg/kg		0.10		SW7471B	12/19/14 16:02 / rgk	12/17/14 08:11	HGCV201-H_141219A	19	27412
METAL, DRY WEIGHT											
Aluminum	33600	mg/kg-dry		20		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-07 Sediment Sieve <0.065mm
Collection Date: 12/04/14 13:15
DateReceived: 12/05/14
Lab ID: H14120109-020
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Arsenic	204	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Barium	665	mg/kg-dry		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Cadmium	14.2	mg/kg-dry		0.8		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Chromium	245	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Cobalt	22	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Copper	1710	mg/kg-dry		6		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Iron	66300	mg/kg-dry		10		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Lead	680	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Manganese	5550	mg/kg-dry		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Molybdenum	45	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Nickel	123	mg/kg-dry		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Silver	11	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Uranium	15	mg/kg-dry		5		SW6020	12/25/14 00:32 / sld	12/18/14 09:55	ICPMS204-B_141224B	271	27432
Vanadium	173	mg/kg-dry		4		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Zinc	5100	mg/kg-dry		5		SW6010B	12/24/14 19:20 / sld	12/18/14 09:55	ICP2-HE_141224B	143	27432
Mercury	1.2	mg/kg-dry		0.10		SW7471B	12/19/14 16:02 / rgk	12/17/14 08:11	HGCV201-H_141219A	91	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Lab ID: H14120109-021
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	42.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	5	R103020
PHYSICAL CHARACTERISTICS											
Moisture	23.2	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	13	R103021
3050 EXTRACTABLE METALS											
Aluminum	4480	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Arsenic	26	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Barium	65	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Cadmium	1.4	mg/kg		0.2		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Chromium	10	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Copper	187	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Iron	16200	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Lead	62	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Manganese	618	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Nickel	5	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	24	27433
Vanadium	32	mg/kg		1		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
Zinc	657	mg/kg		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	39	27433
METALS, TOTAL											
Mercury	0.24	mg/kg		0.10		SW7471B	12/19/14 16:05 / rgk	12/17/14 08:11	HGCV201-H_141219A	20	27412
METAL, DRY WEIGHT											
Aluminum	5830	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-07 Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 13:15
DateReceived: 12/05/14
Lab ID: H14120109-021
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Arsenic	34	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Barium	85	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Cadmium	1.9	mg/kg-dry		0.2		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Chromium	13	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Cobalt	6	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Copper	244	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Iron	21100	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Lead	80	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Manganese	804	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Nickel	7	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 18:21 / sld	12/18/14 09:57	ICPMS204-B_141224B	193	27433
Vanadium	42	mg/kg-dry		1		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Zinc	855	mg/kg-dry		5		SW6010B	12/23/14 15:19 / sld	12/18/14 09:57	ICP2-HE_141223B	75	27433
Mercury	0.32	mg/kg-dry		0.10		SW7471B	12/19/14 16:05 / rgk	12/17/14 08:11	HGCV201-H_141219A	92	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14120109-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	28.0	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	6	R103020
PHYSICAL CHARACTERISTICS											
Moisture	16.5	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	14	R103021
3050 EXTRACTABLE METALS											
Aluminum	3000	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Arsenic	16	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Barium	48	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Cadmium	0.7	mg/kg		0.2		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Chromium	7	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Copper	86	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Iron	6780	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Lead	30	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Manganese	393	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	137	27434
Vanadium	15	mg/kg		1		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
Zinc	282	mg/kg		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	107	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/19/14 16:07 / rgk	12/17/14 08:11	HGCV201-H_141219A	21	27412
METAL, DRY WEIGHT											
Aluminum	3590	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-07 Sediment Sieve 1-2mm
Lab ID: H14120109-022
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 13:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Arsenic	19	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Barium	58	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Cadmium	0.8	mg/kg-dry		0.2		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Chromium	8	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Copper	103	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Iron	8120	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Lead	35	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Manganese	470	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 03:20 / sld	12/18/14 09:58	ICPMS204-B_141224B	306	27434
Vanadium	18	mg/kg-dry		1		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Zinc	338	mg/kg-dry		5		SW6010B	12/24/14 21:03 / sld	12/18/14 09:58	ICP2-HE_141224B	168	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/19/14 16:07 / rgk	12/17/14 08:11	HGCV201-H_141219A	93	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Lab ID: H14120109-023
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	15.3	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	7	R103020
PHYSICAL CHARACTERISTICS											
Moisture	81.5	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	15	R103021
3050 EXTRACTABLE METALS											
Aluminum	5360	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Arsenic	15	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Barium	90	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Cadmium	2.3	mg/kg		0.2		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Chromium	28	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Copper	199	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Iron	8110	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Lead	91	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Manganese	490	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Nickel	15	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	103	27432
Vanadium	18	mg/kg		1		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
Zinc	475	mg/kg		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	80	27432
METALS, TOTAL											
Mercury	0.44	mg/kg		0.10		SW7471B	12/19/14 16:09 / rgk	12/17/14 08:11	HGCV201-H_141219A	22	27412
METAL, DRY WEIGHT											
Aluminum	29000	mg/kg-dry		20		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-08 Sediment Sieve <0.065mm
Collection Date: 12/04/14 12:30
DateReceived: 12/05/14
Lab ID: H14120109-023
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Arsenic	83	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Barium	489	mg/kg-dry		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Cadmium	12.2	mg/kg-dry		0.9		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Chromium	153	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Cobalt	15	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Copper	1080	mg/kg-dry		6		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Iron	43800	mg/kg-dry		20		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Lead	490	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Manganese	2650	mg/kg-dry		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Molybdenum	26	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Nickel	82	mg/kg-dry		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Silver	7	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Uranium	12	mg/kg-dry		5		SW6020	12/25/14 00:37 / sld	12/18/14 09:55	ICPMS204-B_141224B	272	27432
Vanadium	99	mg/kg-dry		4		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Zinc	2560	mg/kg-dry		5		SW6010B	12/24/14 19:24 / sld	12/18/14 09:55	ICP2-HE_141224B	144	27432
Mercury	2.4	mg/kg-dry		0.10		SW7471B	12/19/14 16:09 / rgk	12/17/14 08:11	HGCV201-H_141219A	94	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Lab ID: H14120109-024
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	36.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	8	R103020
PHYSICAL CHARACTERISTICS											
Moisture	57.8	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	16	R103021
3050 EXTRACTABLE METALS											
Aluminum	4900	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Arsenic	13	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Barium	84	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Cadmium	2.8	mg/kg		0.2		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Chromium	10	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Copper	257	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Iron	8650	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Lead	60	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Manganese	424	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Nickel	5	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	25	27433
Vanadium	19	mg/kg		1		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
Zinc	461	mg/kg		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	40	27433
METALS, TOTAL											
Mercury	0.47	mg/kg		0.10		SW7471B	12/22/14 13:05 / rgk	12/17/14 08:11	HGCV201-H_141219A	126	27412
METAL, DRY WEIGHT											
Aluminum	11600	mg/kg-dry		8		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-08 Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 12:30
DateReceived: 12/05/14
Lab ID: H14120109-024
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Arsenic	31	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Barium	198	mg/kg-dry		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Boron	11	mg/kg-dry		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Cadmium	6.6	mg/kg-dry		0.4		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Chromium	23	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Cobalt	7	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Copper	608	mg/kg-dry		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Iron	20500	mg/kg-dry		7		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Lead	142	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Manganese	1000	mg/kg-dry		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Nickel	12	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 18:26 / sld	12/18/14 09:57	ICPMS204-B_141224B	194	27433
Vanadium	46	mg/kg-dry		2		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Zinc	1090	mg/kg-dry		5		SW6010B	12/23/14 15:23 / sld	12/18/14 09:57	ICP2-HE_141223B	76	27433
Mercury	1.1	mg/kg-dry		0.12		SW7471B	12/22/14 13:05 / rgk	12/17/14 08:11	HGCV201-H_141219A	137	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14120109-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	18.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	9	R103020
PHYSICAL CHARACTERISTICS											
Moisture	23.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	17	R103021
3050 EXTRACTABLE METALS											
Aluminum	2900	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Arsenic	8	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Barium	64	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Cadmium	0.9	mg/kg		0.2		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Copper	69	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Iron	5420	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Lead	71	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Manganese	1160	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	138	27434
Vanadium	17	mg/kg		1		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
Zinc	212	mg/kg		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	108	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/19/14 16:14 / rgk	12/17/14 08:11	HGCV201-H_141219A	24	27412
METAL, DRY WEIGHT											
Aluminum	3760	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-08 Sediment Sieve 1-2mm
Lab ID: H14120109-025
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 12:30
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Arsenic	11	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Barium	83	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Cadmium	1.2	mg/kg-dry		0.2		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Chromium	5	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Copper	90	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Iron	7040	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Lead	92	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Manganese	1510	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 03:24 / sld	12/18/14 09:58	ICPMS204-B_141224B	307	27434
Vanadium	22	mg/kg-dry		1		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Zinc	275	mg/kg-dry		5		SW6010B	12/24/14 21:07 / sld	12/18/14 09:58	ICP2-HE_141224B	169	27434
Mercury	0.11	mg/kg-dry		0.10		SW7471B	12/19/14 16:14 / rgk	12/17/14 08:11	HGCV201-H_141219A	96	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Lab ID: H14120109-026
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	8.4	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	10	R103020
PHYSICAL CHARACTERISTICS											
Moisture	80.7	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	18	R103021
3050 EXTRACTABLE METALS											
Aluminum	9040	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Arsenic	15	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Barium	123	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Cadmium	2.5	mg/kg		0.2		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Chromium	15	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Copper	227	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Iron	9540	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Lead	91	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Manganese	442	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Nickel	9	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	104	27432
Vanadium	19	mg/kg		1		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
Zinc	514	mg/kg		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	81	27432
METALS, TOTAL											
Mercury	0.31	mg/kg		0.10		SW7471B	12/22/14 13:08 / rgk	12/17/14 08:11	HGCV201-H_141219A	127	27412
METAL, DRY WEIGHT											
Aluminum	46700	mg/kg-dry		20		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Sediment Sieve <0.065mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-026
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Arsenic	77	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Barium	635	mg/kg-dry		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Boron	ND	mg/kg-dry		30		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Cadmium	13.1	mg/kg-dry		0.9		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Chromium	78	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Cobalt	16	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Copper	1170	mg/kg-dry		6		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Iron	49300	mg/kg-dry		20		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Lead	468	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Manganese	2280	mg/kg-dry		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Molybdenum	17	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Nickel	48	mg/kg-dry		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Silver	5	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Uranium	11	mg/kg-dry		5		SW6020	12/25/14 00:42 / sld	12/18/14 09:55	ICPMS204-B_141224B	273	27432
Vanadium	98	mg/kg-dry		4		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Zinc	2660	mg/kg-dry		5		SW6010B	12/24/14 19:27 / sld	12/18/14 09:55	ICP2-HE_141224B	145	27432
Mercury	1.6	mg/kg-dry		0.10		SW7471B	12/22/14 13:08 / rgk	12/17/14 08:11	HGCV201-H_141219A	138	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Lab ID: H14120109-027
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	31.1	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	11	R103020
PHYSICAL CHARACTERISTICS											
Moisture	56.9	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	19	R103021
3050 EXTRACTABLE METALS											
Aluminum	8900	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Arsenic	10	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Barium	98	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Cadmium	2.3	mg/kg		0.2		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Chromium	5	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Copper	167	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Iron	9080	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Lead	73	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Manganese	522	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	26	27433
Vanadium	17	mg/kg		1		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
Zinc	408	mg/kg		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	41	27433
METALS, TOTAL											
Mercury	0.59	mg/kg		0.10		SW7471B	12/19/14 16:58 / rgk	12/17/14 08:11	HGCV201-H_141219A	40	27412
METAL, DRY WEIGHT											
Aluminum	20700	mg/kg-dry		8		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-027
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Arsenic	22	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Barium	226	mg/kg-dry		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Boron	9	mg/kg-dry		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Cadmium	5.4	mg/kg-dry		0.4		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Chromium	12	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Cobalt	7	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Copper	388	mg/kg-dry		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Iron	21100	mg/kg-dry		7		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Lead	170	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Manganese	1210	mg/kg-dry		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Nickel	7	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 18:31 / sld	12/18/14 09:57	ICPMS204-B_141224B	195	27433
Vanadium	40	mg/kg-dry		2		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Zinc	947	mg/kg-dry		5		SW6010B	12/23/14 15:26 / sld	12/18/14 09:57	ICP2-HE_141223B	77	27433
Mercury	1.4	mg/kg-dry		0.23		SW7471B	12/19/14 16:58 / rgk	12/17/14 08:11	HGCV201-H_141219A	112	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14120109-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	19.4	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	12	R103020
PHYSICAL CHARACTERISTICS											
Moisture	46.3	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	20	R103021
3050 EXTRACTABLE METALS											
Aluminum	19100	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Arsenic	9	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Barium	164	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Cadmium	1.8	mg/kg		0.2		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Copper	76	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Iron	12600	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Lead	81	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Manganese	650	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	139	27434
Vanadium	18	mg/kg		1		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
Zinc	345	mg/kg		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	109	27434
METALS, TOTAL											
Mercury	0.35	mg/kg		0.10		SW7471B	12/19/14 16:26 / rgk	12/17/14 08:11	HGCV201-H_141219A	29	27412
METAL, DRY WEIGHT											
Aluminum	35500	mg/kg-dry		6		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10A Sediment Sieve 1-2mm
Lab ID: H14120109-028
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 11:30 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Arsenic	16	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Barium	306	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Boron	9	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Cadmium	3.3	mg/kg-dry		0.3		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Chromium	9	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Cobalt	7	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Copper	141	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Iron	23500	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Lead	151	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Manganese	1210	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Nickel	6	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 03:29 / sld	12/18/14 09:58	ICPMS204-B_141224B	308	27434
Vanadium	33	mg/kg-dry		1		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Zinc	642	mg/kg-dry		5		SW6010B	12/24/14 21:11 / sld	12/18/14 09:58	ICP2-HE_141224B	170	27434
Mercury	0.65	mg/kg-dry		0.10		SW7471B	12/19/14 16:26 / rgk	12/17/14 08:11	HGCV201-H_141219A	101	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 1 Sediment Sieve <0.065mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-029
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	10.0	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	13	R103020
PHYSICAL CHARACTERISTICS											
Moisture	81.4	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	21	R103021
3050 EXTRACTABLE METALS											
Aluminum	6310	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Arsenic	15	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Barium	77	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Cadmium	2.5	mg/kg		0.2		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Chromium	26	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Copper	217	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Iron	7350	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Lead	70	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Manganese	259	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Nickel	15	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	105	27432
Vanadium	15	mg/kg		1		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
Zinc	480	mg/kg		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	82	27432
METALS, TOTAL											
Mercury	0.36	mg/kg		0.10		SW7471B	12/19/14 16:28 / rgk	12/17/14 08:11	HGCV201-H_141219A	30	27412
METAL, DRY WEIGHT											
Aluminum	33900	mg/kg-dry		20		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 1 Sediment Sieve <0.065mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-029
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Arsenic	78	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Barium	415	mg/kg-dry		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Cadmium	13.5	mg/kg-dry		0.8		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Chromium	140	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Cobalt	16	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Copper	1170	mg/kg-dry		6		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Iron	39500	mg/kg-dry		20		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Lead	376	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Manganese	1390	mg/kg-dry		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Molybdenum	19	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Nickel	80	mg/kg-dry		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Uranium	13	mg/kg-dry		5		SW6020	12/25/14 00:47 / sld	12/18/14 09:55	ICPMS204-B_141224B	274	27432
Vanadium	82	mg/kg-dry		4		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Zinc	2580	mg/kg-dry		5		SW6010B	12/24/14 19:31 / sld	12/18/14 09:55	ICP2-HE_141224B	146	27432
Mercury	1.9	mg/kg-dry		0.10		SW7471B	12/19/14 16:28 / rgk	12/17/14 08:11	HGCV201-H_141219A	102	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 1 Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-030
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	46.6	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	14	R103020
PHYSICAL CHARACTERISTICS											
Moisture	67.6	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	22	R103021
3050 EXTRACTABLE METALS											
Aluminum	6820	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Arsenic	11	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Barium	96	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Cadmium	2.5	mg/kg		0.2		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Chromium	8	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Copper	167	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Iron	7870	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Lead	52	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Manganese	255	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	27	27433
Vanadium	15	mg/kg		1		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
Zinc	385	mg/kg		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	42	27433
METALS, TOTAL											
Mercury	0.33	mg/kg		0.10		SW7471B	12/22/14 13:10 / rgk	12/17/14 08:11	HGCV201-H_141219A	128	27412
METAL, DRY WEIGHT											
Aluminum	21000	mg/kg-dry		10		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 1 Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-030
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Arsenic	33	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Barium	297	mg/kg-dry		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Boron	11	mg/kg-dry		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Cadmium	7.9	mg/kg-dry		0.5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Chromium	24	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Cobalt	9	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Copper	516	mg/kg-dry		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Iron	24300	mg/kg-dry		8		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Lead	159	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Manganese	786	mg/kg-dry		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Molybdenum	6	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Nickel	14	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Uranium	7	mg/kg-dry		5		SW6020	12/24/14 18:35 / sld	12/18/14 09:57	ICPMS204-B_141224B	196	27433
Vanadium	47	mg/kg-dry		2		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Zinc	1190	mg/kg-dry		5		SW6010B	12/23/14 15:30 / sld	12/18/14 09:57	ICP2-HE_141223B	78	27433
Mercury	1.0	mg/kg-dry		0.10		SW7471B	12/22/14 13:10 / rgk	12/17/14 08:11	HGCV201-H_141219A	139	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 1 Sediment Sieve 1-2mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-031
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	6.3	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	15	R103020
PHYSICAL CHARACTERISTICS											
Moisture	62.5	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	24	R103021
3050 EXTRACTABLE METALS											
Aluminum	12500	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Arsenic	9	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Barium	111	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Cadmium	2.0	mg/kg		0.2		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Chromium	7	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Copper	100	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Iron	9400	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Lead	49	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Manganese	444	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	140	27434
Vanadium	14	mg/kg		1		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
Zinc	332	mg/kg		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	112	27434
METALS, TOTAL											
Mercury	0.21	mg/kg		0.10		SW7471B	12/19/14 16:40 / rgk	12/17/14 08:11	HGCV201-H_141219A	35	27412
METAL, DRY WEIGHT											
Aluminum	33500	mg/kg-dry		9		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 1 Sediment Sieve 1-2mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-031
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Arsenic	23	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Barium	295	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Boron	10	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Cadmium	5.3	mg/kg-dry		0.4		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Chromium	17	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Cobalt	8	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Copper	268	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Iron	25100	mg/kg-dry		8		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Lead	131	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Manganese	1180	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Nickel	11	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Uranium	6	mg/kg-dry		5		SW6020	12/25/14 03:34 / sld	12/18/14 09:58	ICPMS204-B_141224B	309	27434
Vanadium	38	mg/kg-dry		2		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Zinc	885	mg/kg-dry		5		SW6010B	12/24/14 21:22 / sld	12/18/14 09:58	ICP2-HE_141224B	173	27434
Mercury	0.57	mg/kg-dry		0.10		SW7471B	12/19/14 16:40 / rgk	12/17/14 08:11	HGCV201-H_141219A	107	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 2 Sediment Sieve <0.065mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-032
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	15.3	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	16	R103020
PHYSICAL CHARACTERISTICS											
Moisture	79.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	25	R103021
3050 EXTRACTABLE METALS											
Aluminum	7400	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Arsenic	17	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Barium	87	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Cadmium	2.5	mg/kg		0.2		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Chromium	6	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Copper	214	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Iron	8650	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Lead	102	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Manganese	287	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Nickel	ND	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	106	27432
Vanadium	15	mg/kg		1		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
Zinc	518	mg/kg		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	83	27432
METALS, TOTAL											
Mercury	0.37	mg/kg		0.10		SW7471B	12/19/14 16:43 / rgk	12/17/14 08:11	HGCV201-H_141219A	36	27412
METAL, DRY WEIGHT											
Aluminum	35200	mg/kg-dry		20		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 2 Sediment Sieve <0.065mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-032
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Arsenic	81	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Barium	415	mg/kg-dry		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Cadmium	11.8	mg/kg-dry		0.7		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Chromium	31	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Cobalt	14	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Copper	1020	mg/kg-dry		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Iron	41100	mg/kg-dry		10		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Lead	483	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Manganese	1360	mg/kg-dry		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Molybdenum	15	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Nickel	17	mg/kg-dry		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Uranium	13	mg/kg-dry		5		SW6020	12/25/14 00:51 / sld	12/18/14 09:55	ICPMS204-B_141224B	275	27432
Vanadium	69	mg/kg-dry		3		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Zinc	2460	mg/kg-dry		5		SW6010B	12/24/14 19:35 / sld	12/18/14 09:55	ICP2-HE_141224B	147	27432
Mercury	1.7	mg/kg-dry		0.10		SW7471B	12/19/14 16:43 / rgk	12/17/14 08:11	HGCV201-H_141219A	108	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 2 Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-033
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	30.6	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	17	R103020
PHYSICAL CHARACTERISTICS											
Moisture	44.2	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	26	R103021
3050 EXTRACTABLE METALS											
Aluminum	10600	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Arsenic	19	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Barium	112	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Cadmium	2.5	mg/kg		0.2		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Chromium	5	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Copper	152	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Iron	10700	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Lead	63	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Manganese	350	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	28	27433
Vanadium	19	mg/kg		1		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
Zinc	343	mg/kg		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	43	27433
METALS, TOTAL											
Mercury	0.41	mg/kg		0.10		SW7471B	12/19/14 16:45 / rgk	12/17/14 08:11	HGCV201-H_141219A	37	27412
METAL, DRY WEIGHT											
Aluminum	19000	mg/kg-dry		6		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 2 Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-033
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Arsenic	33	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Barium	200	mg/kg-dry		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Boron	7	mg/kg-dry		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Cadmium	4.5	mg/kg-dry		0.3		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Chromium	9	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Cobalt	6	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Copper	273	mg/kg-dry		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Iron	19100	mg/kg-dry		6		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Lead	113	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Manganese	627	mg/kg-dry		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Nickel	5	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 18:40 / sld	12/18/14 09:57	ICPMS204-B_141224B	197	27433
Vanadium	35	mg/kg-dry		1		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Zinc	615	mg/kg-dry		5		SW6010B	12/23/14 15:34 / sld	12/18/14 09:57	ICP2-HE_141223B	79	27433
Mercury	0.74	mg/kg-dry		0.10		SW7471B	12/19/14 16:45 / rgk	12/17/14 08:11	HGCV201-H_141219A	109	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 2 Sediment Sieve 1-2mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-034
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	26.6	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	18	R103020
PHYSICAL CHARACTERISTICS											
Moisture	52.1	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	27	R103021
3050 EXTRACTABLE METALS											
Aluminum	18400	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Arsenic	6	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Barium	142	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Cadmium	1.1	mg/kg		0.2		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Copper	56	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Iron	11800	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Lead	39	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Manganese	365	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	141	27434
Vanadium	14	mg/kg		1		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
Zinc	199	mg/kg		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	113	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/19/14 16:48 / rgk	12/17/14 08:11	HGCV201-H_141219A	38	27412
METAL, DRY WEIGHT											
Aluminum	38400	mg/kg-dry		7		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10A Duplicate 2 Sediment Sieve 1-2mm
Collection Date: 12/04/14 11:30
DateReceived: 12/05/14
Lab ID: H14120109-034
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Arsenic	13	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Barium	296	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Boron	8	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Cadmium	2.3	mg/kg-dry		0.3		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Chromium	8	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Cobalt	7	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Copper	118	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Iron	24500	mg/kg-dry		6		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Lead	82	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Manganese	762	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Nickel	5	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 03:39 / sld	12/18/14 09:58	ICPMS204-B_141224B	310	27434
Vanadium	28	mg/kg-dry		2		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Zinc	414	mg/kg-dry		5		SW6010B	12/24/14 21:26 / sld	12/18/14 09:58	ICP2-HE_141224B	174	27434
Mercury	0.21	mg/kg-dry		0.10		SW7471B	12/19/14 16:48 / rgk	12/17/14 08:11	HGCV201-H_141219A	110	27412

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Lab ID: H14120109-035
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	5.2	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	19	R103020
PHYSICAL CHARACTERISTICS											
Moisture	71.7	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	28	R103021
3050 EXTRACTABLE METALS											
Aluminum	9530	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Arsenic	14	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Barium	133	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Cadmium	2.5	mg/kg		0.2		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Chromium	9	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Copper	230	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Iron	9960	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Lead	69	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Manganese	767	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Nickel	ND	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	107	27432
Vanadium	20	mg/kg		1		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
Zinc	486	mg/kg		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	84	27432
METALS, TOTAL											
Mercury	0.53	mg/kg		0.10		SW7471B	12/26/14 15:48 / rgk	12/22/14 12:18	HGCV201-H_141226A	30	27464
METAL, DRY WEIGHT											
Aluminum	33700	mg/kg-dry		10		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve <0.065mm
Lab ID: H14120109-035
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Arsenic	48	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Barium	472	mg/kg-dry		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Cadmium	8.9	mg/kg-dry		0.5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Chromium	32	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Cobalt	12	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Copper	813	mg/kg-dry		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Iron	35200	mg/kg-dry		10		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Lead	244	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Manganese	2710	mg/kg-dry		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Molybdenum	10	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Nickel	18	mg/kg-dry		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Uranium	6	mg/kg-dry		5		SW6020	12/25/14 00:56 / sld	12/18/14 09:55	ICPMS204-B_141224B	276	27432
Vanadium	72	mg/kg-dry		3		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Zinc	1720	mg/kg-dry		5		SW6010B	12/24/14 19:38 / sld	12/18/14 09:55	ICP2-HE_141224B	148	27432
Mercury	1.9	mg/kg-dry		0.18		SW7471B	12/26/14 15:48 / rgk	12/22/14 12:18	HGCV201-H_141226A	82	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Lab ID: H14120109-036
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	44.3	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	20	R103020
PHYSICAL CHARACTERISTICS											
Moisture	38.9	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	29	R103021
3050 EXTRACTABLE METALS											
Aluminum	9630	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Arsenic	9	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Barium	125	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Cadmium	2.8	mg/kg		0.2		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Chromium	8	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Copper	160	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Iron	13900	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Lead	42	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Manganese	546	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	29	27433
Vanadium	33	mg/kg		1		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
Zinc	382	mg/kg		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	44	27433
METALS, TOTAL											
Mercury	0.36	mg/kg		0.10		SW7471B	12/26/14 15:09 / rgk	12/22/14 12:18	HGCV201-H_141226A	18	27464
METAL, DRY WEIGHT											
Aluminum	15800	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-10B Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 10:45
DateReceived: 12/05/14
Lab ID: H14120109-036
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Arsenic	14	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Barium	204	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Boron	5	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Cadmium	4.6	mg/kg-dry		0.2		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Chromium	14	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Cobalt	6	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Copper	262	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Iron	22800	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Lead	68	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Manganese	894	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Nickel	6	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 18:45 / sld	12/18/14 09:57	ICPMS204-B_141224B	198	27433
Vanadium	55	mg/kg-dry		1		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Zinc	626	mg/kg-dry		5		SW6010B	12/23/14 15:37 / sld	12/18/14 09:57	ICP2-HE_141223B	80	27433
Mercury	0.59	mg/kg-dry		0.10		SW7471B	12/26/14 15:09 / rgk	12/22/14 12:18	HGCV201-H_141226A	70	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14120109-037
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	10.6	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	21	R103020
PHYSICAL CHARACTERISTICS											
Moisture	41.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	30	R103021
3050 EXTRACTABLE METALS											
Aluminum	5000	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Arsenic	6	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Barium	64	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Cadmium	1.9	mg/kg		0.2		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Copper	59	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Iron	5330	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Lead	58	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Manganese	670	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	142	27434
Vanadium	12	mg/kg		1		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
Zinc	241	mg/kg		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	114	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 15:12 / rgk	12/22/14 12:18	HGCV201-H_141226A	19	27464
METAL, DRY WEIGHT											
Aluminum	8470	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-10B Sediment Sieve 1-2mm
Lab ID: H14120109-037
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Arsenic	10	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Barium	108	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Cadmium	3.2	mg/kg-dry		0.3		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Chromium	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Copper	100	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Iron	9030	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Lead	99	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Manganese	1130	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 03:44 / sld	12/18/14 09:58	ICPMS204-B_141224B	311	27434
Vanadium	20	mg/kg-dry		1		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Zinc	409	mg/kg-dry		5		SW6010B	12/24/14 21:29 / sld	12/18/14 09:58	ICP2-HE_141224B	175	27434
Mercury	0.15	mg/kg-dry		0.10		SW7471B	12/26/14 15:12 / rgk	12/22/14 12:18	HGCV201-H_141226A	71	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Lab ID: H14120109-038
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.9	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	22	R103020
PHYSICAL CHARACTERISTICS											
Moisture	65.9	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	31	R103021
3050 EXTRACTABLE METALS											
Aluminum	11800	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Arsenic	13	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Barium	178	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Cadmium	4.4	mg/kg		0.2		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Chromium	10	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Copper	224	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Iron	11600	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Lead	62	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Manganese	1700	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Nickel	7	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	108	27432
Vanadium	31	mg/kg		1		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
Zinc	599	mg/kg		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	85	27432
METALS, TOTAL											
Mercury	0.37	mg/kg		0.10		SW7471B	12/26/14 15:14 / rgk	12/22/14 12:18	HGCV201-H_141226A	20	27464
METAL, DRY WEIGHT											
Aluminum	34600	mg/kg-dry		9		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11C Sediment Sieve <0.065mm
Collection Date: 12/04/14 10:00
DateReceived: 12/05/14
Lab ID: H14120109-038
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Arsenic	39	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Barium	524	mg/kg-dry		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Cadmium	12.9	mg/kg-dry		0.4		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Chromium	29	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Cobalt	14	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Copper	659	mg/kg-dry		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Iron	34000	mg/kg-dry		8		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Lead	181	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Manganese	4980	mg/kg-dry		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Molybdenum	6	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Nickel	21	mg/kg-dry		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Uranium	6	mg/kg-dry		5		SW6020	12/25/14 01:01 / sld	12/18/14 09:55	ICPMS204-B_141224B	277	27432
Vanadium	92	mg/kg-dry		2		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Zinc	1760	mg/kg-dry		5		SW6010B	12/24/14 19:42 / sld	12/18/14 09:55	ICP2-HE_141224B	149	27432
Mercury	1.1	mg/kg-dry		0.10		SW7471B	12/26/14 15:14 / rgk	12/22/14 12:18	HGCV201-H_141226A	72	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Lab ID: H14120109-039
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	15.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	23	R103020
PHYSICAL CHARACTERISTICS											
Moisture	28.6	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	32	R103021
3050 EXTRACTABLE METALS											
Aluminum	3770	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Arsenic	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Barium	71	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Cadmium	0.8	mg/kg		0.2		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Chromium	8	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Copper	32	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Iron	12000	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Lead	13	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Manganese	507	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	34	27433
Vanadium	37	mg/kg		1		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
Zinc	118	mg/kg		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	45	27433
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 15:16 / rgk	12/22/14 12:18	HGCV201-H_141226A	21	27464
METAL, DRY WEIGHT											
Aluminum	5280	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11C Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 10:00
DateReceived: 12/05/14
Lab ID: H14120109-039
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Arsenic	6	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Barium	99	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Cadmium	1.1	mg/kg-dry		0.2		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Chromium	11	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Copper	44	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Iron	16800	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Lead	18	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Manganese	710	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Nickel	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 19:09 / sld	12/18/14 09:57	ICPMS204-B_141224B	203	27433
Vanadium	52	mg/kg-dry		1		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Zinc	165	mg/kg-dry		5		SW6010B	12/23/14 15:41 / sld	12/18/14 09:57	ICP2-HE_141223B	81	27433
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 15:16 / rgk	12/22/14 12:18	HGCV201-H_141226A	73	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14120109-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	21.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	24	R103020
PHYSICAL CHARACTERISTICS											
Moisture	20.2	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	33	R103021
3050 EXTRACTABLE METALS											
Aluminum	4100	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Arsenic	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Barium	87	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Cadmium	0.4	mg/kg		0.2		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Chromium	5	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Copper	500	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Iron	5020	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Lead	23	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Manganese	763	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	147	27434
Vanadium	16	mg/kg		1		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
Zinc	109	mg/kg		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	115	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 15:19 / rgk	12/22/14 12:18	HGCV201-H_141226A	22	27464
METAL, DRY WEIGHT											
Aluminum	5130	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11C Sediment Sieve 1-2mm
Lab ID: H14120109-040
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 10:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Arsenic	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Barium	109	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Cadmium	0.5	mg/kg-dry		0.2		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Chromium	7	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Copper	626	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Iron	6290	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Lead	29	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Manganese	956	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:08 / sld	12/18/14 09:58	ICPMS204-B_141224B	316	27434
Vanadium	20	mg/kg-dry		1		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Zinc	136	mg/kg-dry		5		SW6010B	12/24/14 21:33 / sld	12/18/14 09:58	ICP2-HE_141224B	176	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 15:19 / rgk	12/22/14 12:18	HGCV201-H_141226A	74	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Lab ID: H14120109-041
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	10.3	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	25	R103020
PHYSICAL CHARACTERISTICS											
Moisture	72.9	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	35	R103021
3050 EXTRACTABLE METALS											
Aluminum	7530	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Arsenic	13	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Barium	117	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Cadmium	2.6	mg/kg		0.2		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Chromium	10	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Copper	178	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Iron	8040	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Lead	52	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Manganese	907	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Nickel	5	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	109	27432
Vanadium	22	mg/kg		1		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
Zinc	459	mg/kg		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	88	27432
METALS, TOTAL											
Mercury	0.33	mg/kg		0.10		SW7471B	12/26/14 15:21 / rgk	12/22/14 12:18	HGCV201-H_141226A	23	27464
METAL, DRY WEIGHT											
Aluminum	27800	mg/kg-dry		10		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11D Sediment Sieve <0.065mm
Collection Date: 12/04/14 09:00
DateReceived: 12/05/14
Lab ID: H14120109-041
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Arsenic	49	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Barium	433	mg/kg-dry		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Cadmium	9.4	mg/kg-dry		0.6		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Chromium	36	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Cobalt	12	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Copper	658	mg/kg-dry		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Iron	29700	mg/kg-dry		10		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Lead	192	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Manganese	3350	mg/kg-dry		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Molybdenum	7	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Nickel	20	mg/kg-dry		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Uranium	7	mg/kg-dry		5		SW6020	12/25/14 01:06 / sld	12/18/14 09:55	ICPMS204-B_141224B	278	27432
Vanadium	80	mg/kg-dry		3		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Zinc	1690	mg/kg-dry		5		SW6010B	12/24/14 19:53 / sld	12/18/14 09:55	ICP2-HE_141224B	152	27432
Mercury	1.2	mg/kg-dry		0.10		SW7471B	12/26/14 15:21 / rgk	12/22/14 12:18	HGCV201-H_141226A	75	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Lab ID: H14120109-042
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	41.9	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	26	R103020
PHYSICAL CHARACTERISTICS											
Moisture	34.4	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	36	R103021
3050 EXTRACTABLE METALS											
Aluminum	4640	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Arsenic	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Barium	104	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Cadmium	0.9	mg/kg		0.2		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Chromium	8	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Copper	34	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Iron	7280	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Lead	11	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Manganese	258	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	35	27433
Vanadium	18	mg/kg		1		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
Zinc	114	mg/kg		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	46	27433
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 15:24 / rgk	12/22/14 12:18	HGCV201-H_141226A	24	27464
METAL, DRY WEIGHT											
Aluminum	7080	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-11D Sediment Sieve 0.065-1mm
Collection Date: 12/04/14 09:00
DateReceived: 12/05/14
Lab ID: H14120109-042
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Arsenic	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Barium	158	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Cadmium	1.3	mg/kg-dry		0.2		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Chromium	12	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Copper	52	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Iron	11100	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Lead	17	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Manganese	393	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Nickel	6	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 19:14 / sld	12/18/14 09:57	ICPMS204-B_141224B	204	27433
Vanadium	28	mg/kg-dry		1		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Zinc	174	mg/kg-dry		5		SW6010B	12/23/14 15:45 / sld	12/18/14 09:57	ICP2-HE_141223B	82	27433
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 15:24 / rgk	12/22/14 12:18	HGCV201-H_141226A	76	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14120109-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	12.4	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	27	R103020
PHYSICAL CHARACTERISTICS											
Moisture	33.8	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	37	R103021
3050 EXTRACTABLE METALS											
Aluminum	4400	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Arsenic	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Barium	123	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Cadmium	0.5	mg/kg		0.2		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Chromium	7	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Copper	27	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Iron	5160	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Lead	10	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Manganese	303	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	148	27434
Vanadium	11	mg/kg		1		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
Zinc	106	mg/kg		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	116	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 15:26 / rgk	12/22/14 12:18	HGCV201-H_141226A	25	27464
METAL, DRY WEIGHT											
Aluminum	6650	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-11D Sediment Sieve 1-2mm
Lab ID: H14120109-043
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 09:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Arsenic	6	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Barium	186	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Cadmium	0.8	mg/kg-dry		0.2		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Chromium	11	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Copper	41	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Iron	7800	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Lead	15	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Manganese	458	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Nickel	6	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:12 / sld	12/18/14 09:58	ICPMS204-B_141224B	317	27434
Vanadium	17	mg/kg-dry		1		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Zinc	160	mg/kg-dry		5		SW6010B	12/24/14 21:37 / sld	12/18/14 09:58	ICP2-HE_141224B	177	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 15:26 / rgk	12/22/14 12:18	HGCV201-H_141226A	77	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14120109-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	16.8	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	28	R103020
PHYSICAL CHARACTERISTICS											
Moisture	74.2	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	38	R103021
3050 EXTRACTABLE METALS											
Aluminum	6530	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Arsenic	13	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Barium	106	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Cadmium	2.9	mg/kg		0.2		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Chromium	8	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Copper	181	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Iron	7640	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Lead	47	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Manganese	693	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Nickel	5	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	110	27432
Vanadium	18	mg/kg		1		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
Zinc	601	mg/kg		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	89	27432
METALS, TOTAL											
Mercury	0.24	mg/kg		0.10		SW7471B	12/26/14 15:28 / rgk	12/22/14 12:18	HGCV201-H_141226A	26	27464
METAL, DRY WEIGHT											
Aluminum	25300	mg/kg-dry		10		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve <0.065mm
Lab ID: H14120109-044
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Arsenic	50	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Barium	413	mg/kg-dry		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Cadmium	11.1	mg/kg-dry		0.6		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Chromium	32	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Cobalt	14	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Copper	703	mg/kg-dry		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Iron	29600	mg/kg-dry		10		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Lead	182	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Manganese	2690	mg/kg-dry		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Molybdenum	7	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Nickel	20	mg/kg-dry		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Uranium	6	mg/kg-dry		5		SW6020	12/25/14 01:11 / sld	12/18/14 09:55	ICPMS204-B_141224B	279	27432
Vanadium	71	mg/kg-dry		3		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Zinc	2330	mg/kg-dry		5		SW6010B	12/24/14 19:57 / sld	12/18/14 09:55	ICP2-HE_141224B	153	27432
Mercury	0.95	mg/kg-dry		0.10		SW7471B	12/26/14 15:28 / rgk	12/22/14 12:18	HGCV201-H_141226A	78	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Lab ID: H14120109-045
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	27.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	29	R103020
PHYSICAL CHARACTERISTICS											
Moisture	36.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	39	R103021
3050 EXTRACTABLE METALS											
Aluminum	6070	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Arsenic	5	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Barium	128	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Cadmium	1.5	mg/kg		0.2		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Chromium	7	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Copper	68	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Iron	8080	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Lead	18	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Manganese	349	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	36	27433
Vanadium	18	mg/kg		1		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
Zinc	232	mg/kg		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	47	27433
METALS, TOTAL											
Mercury	0.16	mg/kg		0.10		SW7471B	12/26/14 16:13 / rgk	12/22/14 12:19	HGCV201-H_141226A	39	27464
METAL, DRY WEIGHT											
Aluminum	9480	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-13 Sediment Sieve 0.065-1mm
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Lab ID: H14120109-045
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Arsenic	8	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Barium	200	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Cadmium	2.4	mg/kg-dry		0.2		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Chromium	12	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Cobalt	5	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Copper	106	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Iron	12600	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Lead	29	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Manganese	546	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Nickel	6	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 19:18 / sld	12/18/14 09:57	ICPMS204-B_141224B	205	27433
Vanadium	28	mg/kg-dry		1		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Zinc	363	mg/kg-dry		5		SW6010B	12/23/14 15:49 / sld	12/18/14 09:57	ICP2-HE_141223B	83	27433
Mercury	0.25	mg/kg-dry		0.10		SW7471B	12/26/14 16:13 / rgk	12/22/14 12:19	HGCV201-H_141226A	91	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14120109-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	20.4	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	30	R103020
PHYSICAL CHARACTERISTICS											
Moisture	20.7	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	40	R103021
3050 EXTRACTABLE METALS											
Aluminum	3680	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Arsenic	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Barium	99	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Cadmium	0.3	mg/kg		0.2		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Chromium	9	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Copper	13	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Iron	4920	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Lead	5	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Manganese	184	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	149	27434
Vanadium	10	mg/kg		1		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
Zinc	63	mg/kg		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	117	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 16:28 / rgk	12/22/14 12:18	HGCV201-H_141226A	44	27464
METAL, DRY WEIGHT											
Aluminum	4640	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-13 Sediment Sieve 1-2mm
Lab ID: H14120109-046
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 17:00
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Arsenic	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Barium	125	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Cadmium	0.3	mg/kg-dry		0.2		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Chromium	11	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Copper	16	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Iron	6200	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Lead	7	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Manganese	232	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Nickel	6	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:17 / sld	12/18/14 09:58	ICPMS204-B_141224B	318	27434
Vanadium	13	mg/kg-dry		1		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Zinc	79	mg/kg-dry		5		SW6010B	12/24/14 21:40 / sld	12/18/14 09:58	ICP2-HE_141224B	178	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 16:28 / rgk	12/22/14 12:18	HGCV201-H_141226A	96	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Lab ID: H14120109-047
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.5	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	31	R103020
PHYSICAL CHARACTERISTICS											
Moisture	71.5	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	41	R103021
3050 EXTRACTABLE METALS											
Aluminum	8020	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Arsenic	13	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Barium	161	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Cadmium	3.6	mg/kg		0.2		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Chromium	12	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Copper	189	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Iron	9470	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Lead	52	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Manganese	1880	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Nickel	6	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	111	27432
Vanadium	27	mg/kg		1		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
Zinc	597	mg/kg		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	90	27432
METALS, TOTAL											
Mercury	0.31	mg/kg		0.10		SW7471B	12/26/14 16:30 / rgk	12/22/14 12:18	HGCV201-H_141226A	45	27464
METAL, DRY WEIGHT											
Aluminum	28100	mg/kg-dry		10		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-14 Sediment Sieve <0.065mm
Collection Date: 12/03/14 15:15
DateReceived: 12/05/14
Lab ID: H14120109-047
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Arsenic	45	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Barium	564	mg/kg-dry		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Boron	ND	mg/kg-dry		20		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Cadmium	12.8	mg/kg-dry		0.5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Chromium	41	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Cobalt	15	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Copper	661	mg/kg-dry		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Iron	33200	mg/kg-dry		10		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Lead	184	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Manganese	6580	mg/kg-dry		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Molybdenum	7	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Nickel	22	mg/kg-dry		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Uranium	6	mg/kg-dry		5		SW6020	12/25/14 01:15 / sld	12/18/14 09:55	ICPMS204-B_141224B	280	27432
Vanadium	94	mg/kg-dry		2		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Zinc	2090	mg/kg-dry		5		SW6010B	12/24/14 20:01 / sld	12/18/14 09:55	ICP2-HE_141224B	154	27432
Mercury	1.1	mg/kg-dry		0.10		SW7471B	12/26/14 16:30 / rgk	12/22/14 12:18	HGCV201-H_141226A	97	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Lab ID: H14120109-048
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	22.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	32	R103020
PHYSICAL CHARACTERISTICS											
Moisture	25.8	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	42	R103021
3050 EXTRACTABLE METALS											
Aluminum	4230	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Arsenic	13	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Barium	106	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Cadmium	0.5	mg/kg		0.2		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Chromium	9	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Copper	31	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Iron	8630	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Lead	154	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Manganese	568	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Uranium	5	mg/kg		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	37	27433
Vanadium	23	mg/kg		1		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
Zinc	162	mg/kg		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	50	27433
METALS, TOTAL											
Mercury	0.64	mg/kg		0.10		SW7471B	12/26/14 16:33 / rgk	12/22/14 12:18	HGCV201-H_141226A	46	27464
METAL, DRY WEIGHT											
Aluminum	5700	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-14 Sediment Sieve 0.065-1mm
Collection Date: 12/03/14 15:15
DateReceived: 12/05/14
Lab ID: H14120109-048
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Arsenic	18	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Barium	142	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Cadmium	0.7	mg/kg-dry		0.2		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Chromium	12	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Copper	42	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Iron	11600	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Lead	208	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Manganese	765	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Nickel	5	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Uranium	7	mg/kg-dry		5		SW6020	12/24/14 19:23 / sld	12/18/14 09:57	ICPMS204-B_141224B	206	27433
Vanadium	30	mg/kg-dry		1		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Zinc	219	mg/kg-dry		5		SW6010B	12/23/14 16:00 / sld	12/18/14 09:57	ICP2-HE_141223B	86	27433
Mercury	0.87	mg/kg-dry		0.10		SW7471B	12/26/14 16:33 / rgk	12/22/14 12:18	HGCV201-H_141226A	98	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14120109-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	15.9	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	33	R103020
PHYSICAL CHARACTERISTICS											
Moisture	15.7	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	43	R103021
3050 EXTRACTABLE METALS											
Aluminum	3680	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Arsenic	7	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Barium	145	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Cadmium	0.5	mg/kg		0.2		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Chromium	7	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Copper	45	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Iron	4650	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Lead	16	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Manganese	940	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	150	27434
Vanadium	14	mg/kg		1		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
Zinc	131	mg/kg		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	118	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 16:35 / rgk	12/22/14 12:18	HGCV201-H_141226A	47	27464
METAL, DRY WEIGHT											
Aluminum	4360	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-14 Sediment Sieve 1-2mm
Lab ID: H14120109-049
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 15:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Arsenic	8	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Barium	172	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Cadmium	0.6	mg/kg-dry		0.2		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Chromium	9	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Copper	53	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Iron	5510	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Lead	18	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Manganese	1110	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:22 / sld	12/18/14 09:58	ICPMS204-B_141224B	319	27434
Vanadium	17	mg/kg-dry		1		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Zinc	156	mg/kg-dry		5		SW6010B	12/24/14 21:44 / sld	12/18/14 09:58	ICP2-HE_141224B	179	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 16:35 / rgk	12/22/14 12:18	HGCV201-H_141226A	99	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14120109-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.9	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	34	R103020
PHYSICAL CHARACTERISTICS											
Moisture	67.4	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	44	R103021
3050 EXTRACTABLE METALS											
Aluminum	11000	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Arsenic	33	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Barium	205	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Cadmium	2.9	mg/kg		0.2		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Chromium	14	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Copper	419	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Iron	12600	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Lead	98	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Manganese	1370	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Nickel	8	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	116	27432
Vanadium	29	mg/kg		1		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
Zinc	695	mg/kg		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	91	27432
METALS, TOTAL											
Mercury	0.64	mg/kg		0.10		SW7471B	12/26/14 16:38 / rgk	12/22/14 12:18	HGCV201-H_141226A	48	27464
METAL, DRY WEIGHT											
Aluminum	33800	mg/kg-dry		10		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve <0.065mm
Lab ID: H14120109-050
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Arsenic	100	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Barium	629	mg/kg-dry		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Cadmium	8.8	mg/kg-dry		0.5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Chromium	44	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Cobalt	14	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Copper	1290	mg/kg-dry		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Iron	38500	mg/kg-dry		10		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Lead	301	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Manganese	4210	mg/kg-dry		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Nickel	24	mg/kg-dry		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Uranium	5	mg/kg-dry		5		SW6020	12/25/14 01:39 / sld	12/18/14 09:55	ICPMS204-B_141224B	285	27432
Vanadium	90	mg/kg-dry		2		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Zinc	2130	mg/kg-dry		5		SW6010B	12/24/14 20:04 / sld	12/18/14 09:55	ICP2-HE_141224B	155	27432
Mercury	2.0	mg/kg-dry		0.15		SW7471B	12/26/14 16:38 / rgk	12/22/14 12:18	HGCV201-H_141226A	100	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Lab ID: H14120109-051
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	13.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	35	R103020
PHYSICAL CHARACTERISTICS											
Moisture	24.8	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	46	R103021
3050 EXTRACTABLE METALS											
Aluminum	3100	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Arsenic	91	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Barium	72	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Cadmium	10.0	mg/kg		0.2		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Chromium	17	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Cobalt	6	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Copper	399	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Iron	31100	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Lead	194	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Manganese	773	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Nickel	5	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	38	27433
Vanadium	78	mg/kg		1		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
Zinc	3080	mg/kg		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	51	27433
METALS, TOTAL											
Mercury	0.44	mg/kg		0.10		SW7471B	12/26/14 16:40 / rgk	12/22/14 12:18	HGCV201-H_141226A	49	27464
METAL, DRY WEIGHT											
Aluminum	4120	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15A Sediment Sieve 0.065-1mm
Collection Date: 12/03/14 13:45
DateReceived: 12/05/14
Lab ID: H14120109-051
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Arsenic	121	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Barium	96	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Cadmium	13.3	mg/kg-dry		0.2		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Chromium	22	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Cobalt	9	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Copper	530	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Iron	41400	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Lead	258	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Manganese	1030	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Nickel	7	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 19:28 / sld	12/18/14 09:57	ICPMS204-B_141224B	207	27433
Vanadium	104	mg/kg-dry		1		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Zinc	4100	mg/kg-dry		5		SW6010B	12/23/14 16:03 / sld	12/18/14 09:57	ICP2-HE_141223B	87	27433
Mercury	0.59	mg/kg-dry		0.10		SW7471B	12/26/14 16:40 / rgk	12/22/14 12:18	HGCV201-H_141226A	101	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14120109-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	16.1	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	36	R103020
PHYSICAL CHARACTERISTICS											
Moisture	14.1	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	47	R103021
3050 EXTRACTABLE METALS											
Aluminum	3140	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Arsenic	43	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Barium	54	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Cadmium	0.8	mg/kg		0.2		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Chromium	8	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Copper	204	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Iron	10400	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Lead	60	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Manganese	432	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	151	27434
Vanadium	15	mg/kg		1		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
Zinc	300	mg/kg		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	119	27434
METALS, TOTAL											
Mercury	0.11	mg/kg		0.10		SW7471B	12/26/14 16:42 / rgk	12/22/14 12:18	HGCV201-H_141226A	50	27464
METAL, DRY WEIGHT											
Aluminum	3660	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15A Sediment Sieve 1-2mm
Lab ID: H14120109-052
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Arsenic	50	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Barium	63	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Cadmium	1.0	mg/kg-dry		0.2		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Chromium	9	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Copper	238	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Iron	12100	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Lead	70	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Manganese	503	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:27 / sld	12/18/14 09:58	ICPMS204-B_141224B	320	27434
Vanadium	18	mg/kg-dry		1		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Zinc	349	mg/kg-dry		5		SW6010B	12/24/14 21:48 / sld	12/18/14 09:58	ICP2-HE_141224B	180	27434
Mercury	0.13	mg/kg-dry		0.10		SW7471B	12/26/14 16:42 / rgk	12/22/14 12:18	HGCV201-H_141226A	102	27464

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14120109-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.5	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	37	R103020
PHYSICAL CHARACTERISTICS											
Moisture	65.2	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	48	R103021
3050 EXTRACTABLE METALS											
Aluminum	13000	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Arsenic	59	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Barium	254	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Cadmium	6.1	mg/kg		0.2		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Chromium	20	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Cobalt	6	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Copper	528	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Iron	15600	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Lead	194	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Manganese	1900	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Nickel	11	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	117	27432
Vanadium	37	mg/kg		1		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
Zinc	983	mg/kg		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	92	27432
METALS, TOTAL											
Mercury	0.94	mg/kg		0.10		SW7471B	12/26/14 12:40 / rgk	12/22/14 12:34	HGCV201-H_141226B	13	27465
METAL, DRY WEIGHT											
Aluminum	37500	mg/kg-dry		9		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve <0.065mm
Lab ID: H14120109-053
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Arsenic	168	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Barium	730	mg/kg-dry		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Cadmium	17.4	mg/kg-dry		0.4		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Chromium	57	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Cobalt	18	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Copper	1520	mg/kg-dry		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Iron	44800	mg/kg-dry		8		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Lead	557	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Manganese	5470	mg/kg-dry		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Molybdenum	6	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Nickel	32	mg/kg-dry		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Silver	8	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Uranium	5	mg/kg-dry		5		SW6020	12/25/14 01:44 / sld	12/18/14 09:55	ICPMS204-B_141224B	286	27432
Vanadium	107	mg/kg-dry		2		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Zinc	2830	mg/kg-dry		5		SW6010B	12/24/14 20:08 / sld	12/18/14 09:55	ICP2-HE_141224B	156	27432
Mercury	2.7	mg/kg-dry		0.14		SW7471B	12/26/14 12:40 / rgk	12/22/14 12:34	HGCV201-H_141226B	58	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Lab ID: H14120109-054
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	43.5	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	38	R103020
PHYSICAL CHARACTERISTICS											
Moisture	22.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	49	R103021
3050 EXTRACTABLE METALS											
Aluminum	4270	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Arsenic	47	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Barium	78	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Cadmium	1.3	mg/kg		0.2		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Chromium	10	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Copper	197	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Iron	12900	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Lead	72	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Manganese	448	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Nickel	6	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	39	27433
Vanadium	28	mg/kg		1		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
Zinc	519	mg/kg		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	52	27433
METALS, TOTAL											
Mercury	0.27	mg/kg		0.10		SW7471B	12/26/14 12:42 / rgk	12/22/14 12:34	HGCV201-H_141226B	14	27465
METAL, DRY WEIGHT											
Aluminum	5480	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-15B Sediment Sieve 0.065-1mm
Collection Date: 12/03/14 12:15
DateReceived: 12/05/14
Lab ID: H14120109-054
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Arsenic	61	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Barium	100	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Cadmium	1.7	mg/kg-dry		0.2		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Chromium	13	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Copper	253	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Iron	16600	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Lead	92	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Manganese	575	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Nickel	7	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Uranium	5	mg/kg-dry		5		SW6020	12/24/14 19:33 / sld	12/18/14 09:57	ICPMS204-B_141224B	208	27433
Vanadium	36	mg/kg-dry		1		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Zinc	666	mg/kg-dry		5		SW6010B	12/23/14 16:07 / sld	12/18/14 09:57	ICP2-HE_141223B	88	27433
Mercury	0.34	mg/kg-dry		0.10		SW7471B	12/26/14 12:42 / rgk	12/22/14 12:34	HGCV201-H_141226B	59	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14120109-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	37.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	39	R103020
PHYSICAL CHARACTERISTICS											
Moisture	19.2	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	50	R103021
3050 EXTRACTABLE METALS											
Aluminum	6790	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Arsenic	62	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Barium	99	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Cadmium	1.0	mg/kg		0.2		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Chromium	17	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Copper	186	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Iron	11100	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Lead	41	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Manganese	649	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Nickel	9	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	152	27434
Vanadium	23	mg/kg		1		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
Zinc	334	mg/kg		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	120	27434
METALS, TOTAL											
Mercury	0.11	mg/kg		0.10		SW7471B	12/26/14 13:15 / rgk	12/22/14 12:34	HGCV201-H_141226B	26	27465
METAL, DRY WEIGHT											
Aluminum	8410	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-15B Sediment Sieve 1-2mm
Lab ID: H14120109-055
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 12:15 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Arsenic	77	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Barium	122	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Cadmium	1.2	mg/kg-dry		0.2		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Chromium	21	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Copper	231	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Iron	13800	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Lead	51	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Manganese	803	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Nickel	11	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:32 / sld	12/18/14 09:58	ICPMS204-B_141224B	321	27434
Vanadium	29	mg/kg-dry		1		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Zinc	414	mg/kg-dry		5		SW6010B	12/24/14 21:52 / sld	12/18/14 09:58	ICP2-HE_141224B	181	27434
Mercury	0.13	mg/kg-dry		0.10		SW7471B	12/26/14 13:15 / rgk	12/22/14 12:34	HGCV201-H_141226B	71	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Lab ID: H14120109-056
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	2.0	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	40	R103020
PHYSICAL CHARACTERISTICS											
Moisture	62.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	51	R103021
3050 EXTRACTABLE METALS											
Aluminum	11400	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Arsenic	33	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Barium	181	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Cadmium	3.0	mg/kg		0.2		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Chromium	20	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Cobalt	5	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Copper	322	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Iron	15600	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Lead	114	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Manganese	1680	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Nickel	10	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	118	27432
Vanadium	43	mg/kg		1		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
Zinc	760	mg/kg		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	93	27432
METALS, TOTAL											
Mercury	0.77	mg/kg		0.10		SW7471B	12/26/14 12:54 / rgk	12/22/14 12:34	HGCV201-H_141226B	19	27465
METAL, DRY WEIGHT											
Aluminum	29900	mg/kg-dry		8		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-16B Sediment Sieve <0.065mm
Collection Date: 12/03/14 10:45
DateReceived: 12/05/14
Lab ID: H14120109-056
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Arsenic	88	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Barium	477	mg/kg-dry		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Cadmium	7.9	mg/kg-dry		0.4		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Chromium	52	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Cobalt	14	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Copper	846	mg/kg-dry		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Iron	41000	mg/kg-dry		8		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Lead	300	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Manganese	4430	mg/kg-dry		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Nickel	27	mg/kg-dry		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 01:49 / sld	12/18/14 09:55	ICPMS204-B_141224B	287	27432
Vanadium	113	mg/kg-dry		2		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Zinc	2000	mg/kg-dry		5		SW6010B	12/24/14 20:12 / sld	12/18/14 09:55	ICP2-HE_141224B	157	27432
Mercury	2.0	mg/kg-dry		0.13		SW7471B	12/26/14 12:54 / rgk	12/22/14 12:34	HGCV201-H_141226B	64	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Lab ID: H14120109-057
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	34.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	41	R103020
PHYSICAL CHARACTERISTICS											
Moisture	20.3	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	52	R103021
3050 EXTRACTABLE METALS											
Aluminum	3720	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Arsenic	38	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Barium	76	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Cadmium	2.8	mg/kg		0.2		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Chromium	19	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Cobalt	7	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Copper	139	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Iron	29500	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Lead	47	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Manganese	665	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	40	27433
Vanadium	95	mg/kg		1		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
Zinc	720	mg/kg		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	53	27433
METALS, TOTAL											
Mercury	0.20	mg/kg		0.10		SW7471B	12/26/14 12:57 / rgk	12/22/14 12:34	HGCV201-H_141226B	20	27465
METAL, DRY WEIGHT											
Aluminum	4670	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-16B Sediment Sieve 0.065-1mm
Collection Date: 12/03/14 10:45
DateReceived: 12/05/14
Lab ID: H14120109-057
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Arsenic	48	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Barium	95	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Cadmium	3.5	mg/kg-dry		0.2		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Chromium	23	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Cobalt	8	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Copper	174	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Iron	37100	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Lead	60	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Manganese	835	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Nickel	6	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 19:37 / sld	12/18/14 09:57	ICPMS204-B_141224B	209	27433
Vanadium	119	mg/kg-dry		1		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Zinc	903	mg/kg-dry		5		SW6010B	12/23/14 16:11 / sld	12/18/14 09:57	ICP2-HE_141223B	89	27433
Mercury	0.26	mg/kg-dry		0.10		SW7471B	12/26/14 12:57 / rgk	12/22/14 12:34	HGCV201-H_141226B	65	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14120109-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	13.4	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	42	R103020
PHYSICAL CHARACTERISTICS											
Moisture	16.5	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	53	R103021
3050 EXTRACTABLE METALS											
Aluminum	3390	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Arsenic	28	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Barium	60	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Cadmium	0.7	mg/kg		0.2		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Chromium	6	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Copper	122	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Iron	8480	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Lead	30	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Manganese	557	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	153	27434
Vanadium	20	mg/kg		1		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
Zinc	230	mg/kg		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	121	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 12:59 / rgk	12/22/14 12:34	HGCV201-H_141226B	21	27465
METAL, DRY WEIGHT											
Aluminum	4060	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-16B Sediment Sieve 1-2mm
Lab ID: H14120109-058
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 10:45
DateReceived: 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Arsenic	33	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Barium	71	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Cadmium	0.8	mg/kg-dry		0.2		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Chromium	8	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Copper	146	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Iron	10200	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Lead	36	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Manganese	666	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:36 / sld	12/18/14 09:58	ICPMS204-B_141224B	322	27434
Vanadium	24	mg/kg-dry		1		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Zinc	276	mg/kg-dry		5		SW6010B	12/24/14 21:55 / sld	12/18/14 09:58	ICP2-HE_141224B	182	27434
Mercury	0.11	mg/kg-dry		0.10		SW7471B	12/26/14 12:59 / rgk	12/22/14 12:34	HGCV201-H_141226B	66	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14120109-059
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	4.0	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	43	R103020
PHYSICAL CHARACTERISTICS											
Moisture	62.6	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	54	R103021
3050 EXTRACTABLE METALS											
Aluminum	11400	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Arsenic	85	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Barium	175	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Cadmium	5.1	mg/kg		0.2		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Chromium	17	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Copper	895	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Iron	15800	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Lead	307	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Manganese	880	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Nickel	9	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	119	27432
Vanadium	35	mg/kg		1		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
Zinc	1200	mg/kg		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	94	27432
METALS, TOTAL											
Mercury	2.0	mg/kg		0.10		SW7471B	12/26/14 13:02 / rgk	12/22/14 12:34	HGCV201-H_141226B	22	27465
METAL, DRY WEIGHT											
Aluminum	30400	mg/kg-dry		9		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve <0.065mm
Lab ID: H14120109-059
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Arsenic	227	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Barium	467	mg/kg-dry		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Cadmium	13.6	mg/kg-dry		0.4		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Chromium	44	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Cobalt	13	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Copper	2390	mg/kg-dry		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Iron	42100	mg/kg-dry		8		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Lead	822	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Manganese	2350	mg/kg-dry		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Nickel	23	mg/kg-dry		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Silver	13	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Uranium	12	mg/kg-dry		5		SW6020	12/25/14 01:54 / sld	12/18/14 09:55	ICPMS204-B_141224B	288	27432
Vanadium	93	mg/kg-dry		2		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Zinc	3220	mg/kg-dry		5		SW6010B	12/24/14 20:15 / sld	12/18/14 09:55	ICP2-HE_141224B	158	27432
Mercury	5.3	mg/kg-dry		0.27		SW7471B	12/26/14 13:02 / rgk	12/22/14 12:34	HGCV201-H_141226B	67	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Lab ID: H14120109-060
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	30.8	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	44	R103020
PHYSICAL CHARACTERISTICS											
Moisture	25.6	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	55	R103021
3050 EXTRACTABLE METALS											
Aluminum	3420	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Arsenic	31	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Barium	71	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Boron	ND	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Cadmium	1.4	mg/kg		0.2		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Chromium	13	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Cobalt	ND	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Copper	177	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Iron	18700	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Lead	71	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Manganese	469	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Nickel	ND	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Uranium	7	mg/kg		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	41	27433
Vanadium	57	mg/kg		1		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
Zinc	377	mg/kg		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	54	27433
METALS, TOTAL											
Mercury	0.35	mg/kg		0.10		SW7471B	12/26/14 13:04 / rgk	12/22/14 12:34	HGCV201-H_141226B	23	27465
METAL, DRY WEIGHT											
Aluminum	4600	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Project: Silver Bow Creek Monitoring
Client Sample ID: SS-17D Sediment Sieve 0.065-1mm
Collection Date: 12/03/14 09:45
DateReceived: 12/05/14
Lab ID: H14120109-060
Report Date: 01/06/15
Matrix: Sediment

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Arsenic	42	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Barium	95	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Cadmium	1.9	mg/kg-dry		0.2		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Chromium	17	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Copper	237	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Iron	25100	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Lead	95	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Manganese	630	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Nickel	ND	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Uranium	10	mg/kg-dry		5		SW6020	12/24/14 19:42 / sld	12/18/14 09:57	ICPMS204-B_141224B	210	27433
Vanadium	76	mg/kg-dry		1		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Zinc	506	mg/kg-dry		5		SW6010B	12/23/14 16:14 / sld	12/18/14 09:57	ICP2-HE_141223B	90	27433
Mercury	0.47	mg/kg-dry		0.10		SW7471B	12/26/14 13:04 / rgk	12/22/14 12:34	HGCV201-H_141226B	68	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14120109-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	30.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	45	R103020
PHYSICAL CHARACTERISTICS											
Moisture	15.9	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	57	R103021
3050 EXTRACTABLE METALS											
Aluminum	2860	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Arsenic	21	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Barium	63	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Cadmium	1.0	mg/kg		0.2		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Copper	102	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Iron	8250	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Lead	36	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Manganese	511	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	154	27434
Vanadium	21	mg/kg		1		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
Zinc	264	mg/kg		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	131	27434
METALS, TOTAL											
Mercury	0.16	mg/kg		0.10		SW7471B	12/26/14 13:06 / rgk	12/22/14 12:34	HGCV201-H_141226B	24	27465
METAL, DRY WEIGHT											
Aluminum	3390	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: MT DEQ-Federal Superfund
Client Sample ID: SS-17D Sediment Sieve 1-2mm
Lab ID: H14120109-061
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 09:45 **DateReceived:** 12/05/14
Report Date: 01/06/15

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Arsenic	25	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Barium	75	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Cadmium	1.2	mg/kg-dry		0.2		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Chromium	6	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Copper	121	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Iron	9800	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Lead	43	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Manganese	607	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:41 / sld	12/18/14 09:58	ICPMS204-B_141224B	323	27434
Vanadium	25	mg/kg-dry		1		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Zinc	314	mg/kg-dry		5		SW6010B	12/24/14 22:33 / sld	12/18/14 09:58	ICP2-HE_141224B	192	27434
Mercury	0.18	mg/kg-dry		0.10		SW7471B	12/26/14 13:06 / rgk	12/22/14 12:34	HGCV201-H_141226B	69	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141212Dwa

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141212A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **12/12/14 12:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002	0	97	90	110				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Run ID :Run Order: **HGCV202-H_141212A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **12/12/14 12:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002	0	99	95	105				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Run ID :Run Order: **HGCV202-H_141212A: 25** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **12/12/14 14:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	107	90	110				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141215wa

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141215A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **12/15/14 14:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002	0	99	90	110				

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **HGCV202-H_141215A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **12/15/14 14:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	103	95	105				

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **HGCV202-H_141215A: 25** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **12/15/14 16:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	105	90	110				

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141216WA

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141216A: 31** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **12/16/14 13:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002	0	99	90	110				

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Run ID :Run Order: **HGCV202-H_141216A: 32** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **12/16/14 13:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	103	95	105				

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Run ID :Run Order: **HGCV202-H_141216A: 107** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **12/17/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002	0	95	90	110				

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141219SA

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141219A: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **12/19/14 15:28** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0011	0.50	0.001	0	110	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 8** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/19/14 15:30** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025	0	102	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/19/14 16:19** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025	0	108	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 39** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/19/14 16:50** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0028	0.50	0.0025	0	110	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141219SA

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141219A: 42** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/19/14 17:06** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0027	0.50	0.0025	0	109	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141222SA

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141219A: 110** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **12/22/14 12:51** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0011	0.50	0.001	0	110	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 111** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/22/14 12:54** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025	0	103	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 132** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/22/14 13:20** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025	0	98	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141226aSA

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141226A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **12/26/14 14:42** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00095	0.50	0.001	0	95	90	110				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/26/14 14:44** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025	0	95	90	110				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 37** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/26/14 16:08** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025	0	100	90	110				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/26/14 16:45** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0025	0.50	0.0025	0	100	90	110				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141226bSA

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141226B: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**

Analysis Date: **12/26/14 12:22** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00096	0.50	0.001	0	96	90	110				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 8** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/26/14 12:27** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025	0	96	90	110				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 44** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**

Analysis Date: **12/26/14 14:01** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0028	0.50	0.0025	0	110	90	110				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 61** SampType: **Method Blank** Lab ID: **MB-27299** Method: **E200.7**
Analysis Date: **12/09/14 14:54** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.004	0.003									
Boron	ND	0.002									
Calcium	0.05	0.03									
Iron	ND	0.005									
Magnesium	ND	0.03									
Manganese	ND	0.0006									
Potassium	ND	0.05									
Sodium	ND	0.02									

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 62** SampType: **Laboratory Control Sample** Lab ID: **LCS-27299** Method: **E200.7**
Analysis Date: **12/09/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.55	0.030	2.5	0.00357	102	85	115				
Boron	0.478	0.050	0.5	0	96	85	115				
Calcium	24.2	1.0	25	0.04531	96	85	115				
Iron	2.42	0.020	2.5	0	97	85	115				
Magnesium	24.2	1.0	25	0	97	85	115				
Manganese	2.43	0.0010	2.5	0	97	85	115				
Potassium	24.9	1.0	25	0	99	85	115				
Sodium	25.1	1.0	25	0	100	85	115				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 64** SampType: **Serial Dilution** Lab ID: **H14120109-001CDIL** Method: **E200.7**
Analysis Date: **12/09/14 15:06** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.272	0.030		0		0	0	0.26	4.4	10	
Boron	0.0490	0.050		0		0	0	0.05331		10	N
Calcium	53.1	1.0		0		0	0	52.28	1.6	10	
Iron	0.583	0.027		0		0	0	0.5782	0.8	10	
Magnesium	13.3	1.0		0		0	0	13.36	0.5	10	
Manganese	0.153	0.0032		0		0	0	0.1514	1.2	10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 64** SampType: **Serial Dilution** Lab ID: **H14120109-001CDIL** Method: **E200.7**

Analysis Date: **12/09/14 15:06** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	3.72	1.0		0		0	0	4.016	7.6	10	
Sodium	22.7	1.0		0		0	0	22.43	1.2	10	

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 65** SampType: **Sample Matrix Spike** Lab ID: **H14120109-001CMS3** Method: **E200.7**

Analysis Date: **12/09/14 15:09** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.84	0.030	2.5	0.26	103	70	130				
Boron	0.547	0.050	0.5	0.05331	99	70	130				
Calcium	76.9	1.0	25	52.28	99	70	130				
Iron	3.01	0.020	2.5	0.5782	97	70	130				
Magnesium	37.5	1.0	25	13.36	97	70	130				
Manganese	2.60	0.0010	2.5	0.1514	98	70	130				
Potassium	29.7	1.0	25	4.016	103	70	130				
Sodium	48.6	1.0	25	22.43	105	70	130				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 66** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-001CMSD3** Method: **E200.7**

Analysis Date: **12/09/14 15:13** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.89	0.030	2.5	0.26	105	70	130	2.84	1.6	20	
Boron	0.554	0.050	0.5	0.05331	100	70	130	0.5466	1.4	20	
Calcium	76.0	1.0	25	52.28	95	70	130	76.95	1.3	20	
Iron	2.98	0.020	2.5	0.5782	96	70	130	3.005	0.7	20	
Magnesium	37.5	1.0	25	13.36	97	70	130	37.53	0.0	20	
Manganese	2.59	0.0010	2.5	0.1514	98	70	130	2.6	0.2	20	
Potassium	28.7	1.0	25	4.016	99	70	130	29.67	3.3	20	
Sodium	47.0	1.0	25	22.43	98	70	130	48.64	3.3	20	

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 79** SampType: **Serial Dilution** Lab ID: **H14120109-011CDIL** Method: **E200.7**

Analysis Date: **12/09/14 16:02** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1.85	0.033		0		0	0	1.749	5.6	10	
Boron	0.0539	0.050		0		0	0	0.05604		10	N
Calcium	63.0	1.0		0		0	0	60.99	3.3	10	
Iron	2.45	0.054		0		0	0	2.38	2.7	10	
Magnesium	13.8	1.0		0		0	0	13.51	1.8	10	
Manganese	0.775	0.0063		0		0	0	0.7627	1.6	10	
Potassium	5.44	1.0		0		0	0	6.2	13	10	R
Sodium	32.6	1.0		0		0	0	32.13	1.3	10	

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 82** SampType: **Sample Matrix Spike** Lab ID: **H14120109-011CMS3** Method: **E200.7**

Analysis Date: **12/09/14 16:13** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	7.22	0.030	5	1.749	109	70	130				
Boron	1.01	0.050	1	0.05604	96	70	130				
Calcium	110	1.0	50	60.99	97	70	130				
Iron	7.33	0.020	5	2.38	99	70	130				
Magnesium	62.0	1.0	50	13.51	97	70	130				
Manganese	5.68	0.0013	5	0.7627	98	70	130				
Potassium	56.6	1.0	50	6.2	101	70	130				
Sodium	82.6	1.0	50	32.13	101	70	130				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 83** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-011CMSD3** Method: **E200.7**

Analysis Date: **12/09/14 16:17** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	7.16	0.030	5	1.749	108	70	130	7.221	0.9	20	
Boron	1.04	0.050	1	0.05604	98	70	130	1.014	2.4	20	
Calcium	111	1.0	50	60.99	101	70	130	109.6	1.6	20	
Iron	7.24	0.020	5	2.38	97	70	130	7.33	1.2	20	
Magnesium	62.6	1.0	50	13.51	98	70	130	62.01	1.0	20	
Manganese	5.67	0.0013	5	0.7627	98	70	130	5.677	0.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 83** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-011CMSD3** Method: **E200.7**

Analysis Date: **12/09/14 16:17** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	57.6	1.0	50	6.2	**103**	70	130	56.56	**1.7**	20	
Sodium	84.4	1.0	50	32.13	**105**	70	130	82.58	**2.2**	20	

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 171** SampType: **Method Blank** Lab ID: **MB-27299** Method: **E200.8**

Analysis Date: **12/10/14 03:32** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.002	0.0006									
Antimony	9E-05	3E-05									
Arsenic	ND	6E-05									
Barium	0.0005	0.0002									
Beryllium	ND	5E-05									
Boron	ND	0.001									
Cadmium	ND	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.003	0.002									
Lead	ND	3E-05									
Magnesium	ND	0.002									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	0.05	0.02									
Selenium	ND	0.0002									
Silver	8E-05	7E-05									
Sodium	ND	0.03									
Uranium	ND	3E-05									
Vanadium	9E-05	7E-05									
Zinc	0.002	0.001									

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 172** SampType: **Laboratory Control Sample** Lab ID: **LCS-27299** Method: **E200.8**

Analysis Date: **12/10/14 03:37** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.40	0.030	2.5	0.001915	**96**	85	115				
Antimony	0.520	0.0010	0.5	0.000087	**104**	85	115				
Arsenic	0.486	0.0010	0.5	0	**97**	85	115				
Barium	0.508	0.050	0.5	0.0004528	**102**	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 172** SampType: **Laboratory Control Sample** Lab ID: **LCS-27299** Method: **E200.8**

Analysis Date: **12/10/14 03:37** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.264	0.0010	0.25	0	106	85	115				
Boron	0.530	0.050	0.5	0	106	85	115				
Cadmium	0.259	0.0010	0.25	0	103	85	115				
Calcium	26.7	1.0	25	0	107	85	115				
Chromium	0.515	0.0050	0.5	0	103	85	115				
Cobalt	0.474	0.0050	0.5	0	95	85	115				
Copper	0.493	0.0050	0.5	0	99	85	115				
Iron	2.55	0.020	2.5	0.00291	102	85	115				
Lead	0.502	0.0010	0.5	0	100	85	115				
Magnesium	24.8	1.0	25	0	99	85	115				
Manganese	2.40	0.0010	2.5	0	96	85	115				
Molybdenum	0.525	0.0010	0.5	0	105	85	115				
Nickel	0.475	0.0050	0.5	0	95	85	115				
Potassium	26.1	1.0	25	0.04936	104	85	115				
Selenium	0.505	0.0010	0.5	0	101	85	115				
Silver	0.0448	0.0010	0.05	0.000079	89	85	115				
Sodium	25.1	1.0	25	0	100	85	115				
Uranium	0.503	0.00030	0.5	0	101	85	115				
Vanadium	0.514	0.010	0.5	0.0000879	103	85	115				
Zinc	0.476	0.010	0.5	0.001662	95	85	115				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 176** SampType: **Sample Matrix Spike** Lab ID: **H14120109-001CMS3** Method: **E200.8**

Analysis Date: **12/10/14 03:55** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.60	0.030	2.5	0.2294	95	70	130				
Antimony	0.510	0.0010	0.5	0.0002283	102	70	130				
Arsenic	0.490	0.0010	0.5	0.004005	97	70	130				
Barium	0.542	0.050	0.5	0.04725	99	70	130				
Beryllium	0.255	0.0010	0.25	0	102	70	130				
Boron	0.581	0.050	0.5	0.0562	105	70	130				
Cadmium	0.250	0.0010	0.25	0.0001397	100	70	130				
Calcium	80.3	1.0	25	54.88	102	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 176** SampType: **Sample Matrix Spike** Lab ID: **H14120109-001CMS3** Method: **E200.8**

Analysis Date: **12/10/14 03:55** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.519	0.0050	0.5	0.0006043	104	70	130				
Cobalt	0.462	0.0050	0.5	0.0002962	92	70	130				
Copper	0.503	0.0050	0.5	0.0116	98	70	130				
Iron	3.12	0.020	2.5	0.6142	100	70	130				
Lead	0.504	0.0010	0.5	0.003047	100	70	130				
Magnesium	38.5	1.0	25	13.99	98	70	130				
Manganese	2.52	0.0010	2.5	0.1507	95	70	130				
Molybdenum	0.522	0.0010	0.5	0.0057	103	70	130				
Nickel	0.472	0.0050	0.5	0.000464	94	70	130				
Potassium	30.4	1.0	25	4.558	103	70	130				
Selenium	0.486	0.0010	0.5	0.0002076	97	70	130				
Silver	0.0438	0.0010	0.05	0.0001464	87	70	130				
Sodium	47.4	1.0	25	22.64	99	70	130				
Uranium	0.509	0.00030	0.5	0.005135	101	70	130				
Vanadium	0.521	0.010	0.5	0.003083	104	70	130				
Zinc	0.501	0.010	0.5	0.04052	92	70	130				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 177** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-001CMSD3** Method: **E200.8**

Analysis Date: **12/10/14 03:59** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.65	0.030	2.5	0.2294	97	70	130	2.6	1.8	20	
Antimony	0.526	0.0010	0.5	0.0002283	105	70	130	0.5101	3.2	20	
Arsenic	0.495	0.0010	0.5	0.004005	98	70	130	0.4903	0.9	20	
Barium	0.564	0.050	0.5	0.04725	103	70	130	0.5418	4.0	20	
Beryllium	0.257	0.0010	0.25	0	103	70	130	0.255	0.9	20	
Boron	0.590	0.050	0.5	0.0562	107	70	130	0.5813	1.5	20	
Cadmium	0.258	0.0010	0.25	0.0001397	103	70	130	0.2505	2.8	20	
Calcium	80.7	1.0	25	54.88	103	70	130	80.29	0.5	20	
Chromium	0.529	0.0050	0.5	0.0006043	106	70	130	0.519	2.0	20	
Cobalt	0.470	0.0050	0.5	0.0002962	94	70	130	0.4622	1.8	20	
Copper	0.529	0.0050	0.5	0.0116	104	70	130	0.5028	5.2	20	
Iron	3.17	0.020	2.5	0.6142	102	70	130	3.121	1.6	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 177** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-001CMSD3** Method: **E200.8**

Analysis Date: **12/10/14 03:59** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.516	0.0010	0.5	0.003047	103	70	130	0.5038	2.4	20	
Magnesium	40.4	1.0	25	13.99	105	70	130	38.51	4.7	20	
Manganese	2.55	0.0010	2.5	0.1507	96	70	130	2.522	1.1	20	
Molybdenum	0.538	0.0010	0.5	0.0057	106	70	130	0.5222	3.0	20	
Nickel	0.485	0.0050	0.5	0.000464	97	70	130	0.4718	2.8	20	
Potassium	30.8	1.0	25	4.558	105	70	130	30.43	1.0	20	
Selenium	0.492	0.0010	0.5	0.0002076	98	70	130	0.4865	1.1	20	
Silver	0.0450	0.0010	0.05	0.0001464	90	70	130	0.04378	2.8	20	
Sodium	49.4	1.0	25	22.64	107	70	130	47.35	4.3	20	
Uranium	0.522	0.00030	0.5	0.005135	103	70	130	0.5087	2.7	20	
Vanadium	0.530	0.010	0.5	0.003083	105	70	130	0.521	1.7	20	
Zinc	0.516	0.010	0.5	0.04052	95	70	130	0.5007	2.9	20	

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 210** SampType: **Sample Matrix Spike** Lab ID: **H14120109-011CMS3** Method: **E200.8**

Analysis Date: **12/10/14 06:32** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6.64	0.030	5	1.601	101	70	130				
Antimony	1.03	0.0010	1	0.0004432	103	70	130				
Arsenic	0.974	0.0010	1	0.009264	96	70	130				
Barium	1.09	0.050	1	0.0738	102	70	130				
Beryllium	0.514	0.0010	0.5	0	103	70	130				
Boron	1.11	0.050	1	0.06682	104	70	130				
Cadmium	0.500	0.0010	0.5	0.001189	100	70	130				
Calcium	113	1.0	50	64.56	98	70	130				
Chromium	1.03	0.0050	1	0.001788	103	70	130				
Cobalt	0.926	0.0050	1	0.00113	92	70	130				
Copper	1.11	0.0050	1	0.09824	101	70	130				
Iron	7.65	0.020	5	2.542	102	70	130				
Lead	1.01	0.0010	1	0.01782	99	70	130				
Magnesium	65.2	1.0	50	14.61	101	70	130				
Manganese	5.47	0.0010	5	0.745	95	70	130				
Molybdenum	1.04	0.0010	1	0.005304	103	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 210** SampType: **Sample Matrix Spike** Lab ID: **H14120109-011CMS3** Method: **E200.8**

Analysis Date: **12/10/14 06:32** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	0.963	0.0050	1	0.001425	96	70	130				
Potassium	57.4	1.0	50	6.606	102	70	130				
Selenium	0.981	0.0010	1	0.0003658	98	70	130				
Silver	0.0884	0.0010	0.1	0.0003676	88	70	130				
Sodium	82.4	1.0	50	32.28	100	70	130				
Uranium	1.00	0.00030	1	0.006268	100	70	130				
Vanadium	1.02	0.010	1	0.005878	101	70	130				
Zinc	1.22	0.010	1	0.3022	92	70	130				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 211** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-011CMSD3** Method: **E200.8**

Analysis Date: **12/10/14 06:36** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6.59	0.030	5	1.601	100	70	130	6.636	0.7	20	
Antimony	1.03	0.0010	1	0.0004432	102	70	130	1.03	0.4	20	
Arsenic	0.976	0.0010	1	0.009264	97	70	130	0.9742	0.2	20	
Barium	1.07	0.050	1	0.0738	100	70	130	1.089	1.6	20	
Beryllium	0.514	0.0010	0.5	0	103	70	130	0.5138	0.0	20	
Boron	1.13	0.050	1	0.06682	106	70	130	1.108	1.5	20	
Cadmium	0.508	0.0010	0.5	0.001189	101	70	130	0.4998	1.6	20	
Calcium	118	1.0	50	64.56	107	70	130	113.4	4.1	20	
Chromium	1.04	0.0050	1	0.001788	104	70	130	1.033	0.4	20	
Cobalt	0.930	0.0050	1	0.00113	93	70	130	0.9256	0.5	20	
Copper	1.09	0.0050	1	0.09824	99	70	130	1.106	1.5	20	
Iron	7.57	0.020	5	2.542	101	70	130	7.646	1.0	20	
Lead	1.02	0.0010	1	0.01782	100	70	130	1.012	0.7	20	
Magnesium	64.0	1.0	50	14.61	99	70	130	65.18	1.9	20	
Manganese	5.50	0.0010	5	0.745	95	70	130	5.472	0.4	20	
Molybdenum	1.04	0.0010	1	0.005304	103	70	130	1.04	0.4	20	
Nickel	0.944	0.0050	1	0.001425	94	70	130	0.9634	2.0	20	
Potassium	59.3	1.0	50	6.606	105	70	130	57.4	3.3	20	
Selenium	0.986	0.0010	1	0.0003658	99	70	130	0.9812	0.5	20	
Silver	0.0866	0.0010	0.1	0.0003676	86	70	130	0.0884	2.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 211** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-011CMSD3** Method: **E200.8**

Analysis Date: **12/10/14 06:36** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	82.0	1.0	50	32.28	**99**	70	130	82.4	**0.5**	20	
Uranium	1.01	0.00030	1	0.006268	**101**	70	130	1.004	**0.7**	20	
Vanadium	1.05	0.010	1	0.005878	**104**	70	130	1.017	**2.9**	20	
Zinc	1.22	0.010	1	0.3022	**91**	70	130	1.218	**0.1**	20	

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141211B: 53** SampType: **Method Blank** Lab ID: **MB-27299** Method: **E200.8**

Analysis Date: **12/11/14 22:48** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.002	0.0006									
Antimony	ND	3E-05									
Arsenic	ND	6E-05									
Barium	0.0002	0.0002									
Beryllium	ND	5E-05									
Boron	ND	0.001									
Cadmium	ND	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.002	0.002									
Lead	ND	3E-05									
Magnesium	ND	0.002									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	0.02	0.02									
Selenium	ND	0.0002									
Silver	ND	7E-05									
Sodium	ND	0.03									
Uranium	ND	3E-05									
Vanadium	9E-05	7E-05									
Zinc	0.001	0.001									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27299

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141211B: 53** SampType: **Method Blank** Lab ID: **MB-27299** Method: **E200.8**

Analysis Date: **12/11/14 22:48** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27311

Date: *06-Jan-15*

Run ID :Run Order: **FIA202-HE_141208A: 41** SampType: **Laboratory Control Sample** Lab ID: **LCS-27311** Method: **E365.1**
Analysis Date: **12/08/14 14:33** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.389	0.010	0.4	0	97	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-007D, H14120109-008D, H14120109-009D**

Run ID :Run Order: **FIA202-HE_141208A: 42** SampType: **Method Blank** Lab ID: **MB-27311** Method: **E365.1**
Analysis Date: **12/08/14 14:34** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-007D, H14120109-008D, H14120109-009D**

Run ID :Run Order: **FIA202-HE_141208A: 58** SampType: **Sample Matrix Spike** Lab ID: **H14120106-015DMS** Method: **E365.1**
Analysis Date: **12/08/14 14:51** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.271	0.010	0.2	0.05775	107	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-007D, H14120109-008D, H14120109-009D**

Run ID :Run Order: **FIA202-HE_141208A: 59** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120106-015DMSD** Method: **E365.1**
Analysis Date: **12/08/14 14:52** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.272	0.010	0.2	0.05775	107	90	110	0.2708	0.3	20	

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-007D, H14120109-008D, H14120109-009D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27312

Date: *06-Jan-15*

Run ID :Run Order: **FIA202-HE_141208A: 71** SampType: **Laboratory Control Sample** Lab ID: **LCS-27312** Method: **E365.1**
Analysis Date: **12/08/14 15:04** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.401	0.010	0.4	0	100	90	110				

Associated samples: **H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 72** SampType: **Method Blank** Lab ID: **MB-27312** Method: **E365.1**
Analysis Date: **12/08/14 15:05** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 86** SampType: **Sample Matrix Spike** Lab ID: **H14120109-010DMS** Method: **E365.1**
Analysis Date: **12/08/14 15:20** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.687	0.010	0.2	0.4809	103	90	110				

Associated samples: **H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 87** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-010DMSD** Method: **E365.1**
Analysis Date: **12/08/14 15:21** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.681	0.010	0.2	0.4809	100	90	110	0.6866	0.8	20	

Associated samples: **H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141216A: 17** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004DMS** Method: **E365.1**
Analysis Date: **12/16/14 09:20** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.324	0.010	0.2	0.1208	101	90	110				

Associated samples: **H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141216A: 18** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004DMSD** Method: **E365.1**
Analysis Date: **12/16/14 09:21** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.324	0.010	0.2	0.1208	101	90	110	0.3236	0.0	20	

Associated samples: **H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27352

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141212A: 11** SampType: **Method Blank** Lab ID: **MB-27352** Method: **E245.1**
Analysis Date: **12/12/14 13:10** Units: **mg/L** **Prep Info:** Prep Date: **12/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Run ID :Run Order: **HGCV202-H_141212A: 12** SampType: **Laboratory Control Sample** Lab ID: **LCS-27352** Method: **E245.1**
Analysis Date: **12/12/14 13:15** Units: **mg/L** **Prep Info:** Prep Date: **12/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00014	0.00010	0.00015	0	95	90	110				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Run ID :Run Order: **HGCV202-H_141212A: 14** SampType: **Sample Matrix Spike** Lab ID: **H14120106-004CMS** Method: **E245.1**
Analysis Date: **12/12/14 13:23** Units: **mg/L** **Prep Info:** Prep Date: **12/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00027	0.00010	0.00015	0.0001185	101	70	130				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Run ID :Run Order: **HGCV202-H_141212A: 15** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120106-004CMSD** Method: **E245.1**
Analysis Date: **12/12/14 13:27** Units: **mg/L** **Prep Info:** Prep Date: **12/10/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00024	0.00010	0.00015	0.0001185	78	70	130	0.0002696	14	20	

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27357

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141215A: 11** SampType: **Method Blank** Lab ID: **MB-27357** Method: **E245.1**
Analysis Date: **12/15/14 15:02** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **HGCV202-H_141215A: 12** SampType: **Laboratory Control Sample** Lab ID: **LCS-27357** Method: **E245.1**
Analysis Date: **12/15/14 15:06** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0	97	90	110				

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **HGCV202-H_141215A: 14** SampType: **Sample Matrix Spike** Lab ID: **H14120109-010BMS** Method: **E245.1**
Analysis Date: **12/15/14 15:14** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0	108	70	130				

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **HGCV202-H_141215A: 15** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-010BMSD** Method: **E245.1**
Analysis Date: **12/15/14 15:18** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	115	70	130	0.0001624	6.4	20	

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **HGCV202-H_141215A: 32** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001BMS** Method: **E245.1**
Analysis Date: **12/15/14 16:30** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0	108	70	130				

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27357

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141215A: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001BMSD** Method: **E245.1**

Analysis Date: **12/15/14 16:34** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	111	70	130	0.0001617	3.0	20	

Associated samples: **H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27386

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141216A: 34** SampType: **Method Blank** Lab ID: **MB-27386** Method: **E245.1**
Analysis Date: **12/16/14 13:58** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	1E-06									

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Run ID :Run Order: **HGCV202-H_141216A: 35** SampType: **Laboratory Control Sample** Lab ID: **LCS-27386** Method: **E245.1**
Analysis Date: **12/16/14 14:02** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0	101	90	110				

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Run ID :Run Order: **HGCV202-H_141216A: 37** SampType: **Sample Matrix Spike** Lab ID: **H14120109-005BMS** Method: **E245.1**
Analysis Date: **12/16/14 14:11** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0	108	70	130				

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Run ID :Run Order: **HGCV202-H_141216A: 38** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-005BMSD** Method: **E245.1**
Analysis Date: **12/16/14 14:15** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0	109	70	130	0.0001616	1.4	20	

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Run ID :Run Order: **HGCV202-H_141216A: 51** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004BMS** Method: **E245.1**
Analysis Date: **12/16/14 15:10** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	111	70	130				

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27386

Date: *06-Jan-15*

Run ID :Run Order: **HGCV202-H_141216A: 52** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004BMSD** Method: **E245.1**

Analysis Date: **12/16/14 15:14** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	**113**	70	130	0.0001668	**1.2**	20	

Associated samples: **H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27399

Date: *06-Jan-15*

Run ID :Run Order: **FIA202-HE_141216A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-27399** Method: **E365.1**
Analysis Date: **12/16/14 09:14** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.402	0.010	0.4	0	100	90	110				

Associated samples: **H14120109-006D, H14120109-011D**

Run ID :Run Order: **FIA202-HE_141216A: 12** SampType: **Method Blank** Lab ID: **MB-27399** Method: **E365.1**
Analysis Date: **12/16/14 09:15** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14120109-006D, H14120109-011D**

Run ID :Run Order: **FIA202-HE_141216A: 33** SampType: **Sample Matrix Spike** Lab ID: **H14120239-001CMS** Method: **E365.1**
Analysis Date: **12/16/14 09:37** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.208	0.010	0.2	0.02373	92	90	110				

Associated samples: **H14120109-006D, H14120109-011D**

Run ID :Run Order: **FIA202-HE_141216A: 34** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120239-001CMSD** Method: **E365.1**
Analysis Date: **12/16/14 09:38** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.204	0.010	0.2	0.02373	90	90	110	0.2083	2.2	20	

Associated samples: **H14120109-006D, H14120109-011D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27400

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141217B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-27400** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	14.4	0.30	15.2	0	95	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 12** SampType: **Method Blank** Lab ID: **MB-27400** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:41** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 21** SampType: **Sample Matrix Spike** Lab ID: **H14120109-008AMS** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:52** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.14	0.10	1	0	114	90	110				S

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 22** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-008AMSD** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:53** Units: **mg/L** **Prep Info:** Prep Date: **12/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.19	0.10	1	0	119	90	110	1.143	3.8	20	S

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 34** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001AMS** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:07** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.02	0.10	1	0	102	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27400

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141217B: 35** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001AMSD** Method: **A4500 N-C**

Analysis Date: **12/17/14 15:08** Units: **mg/L** **Prep Info:** Prep Date: **12/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.04	0.10	1	0	**104**	90	110	1.018	**2.1**	20	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27412

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141219A: 10** SampType: **Method Blank** Lab ID: **MB-27412** Method: **SW7471B**
Analysis Date: **12/19/14 15:41** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0003									

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-27412** Method: **SW7471B**
Analysis Date: **12/19/14 15:43** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.3	0.50	5	0	107	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 12** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27412** Method: **SW7471B**
Analysis Date: **12/19/14 15:46** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1	0	110	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 15** SampType: **Sample Matrix Spike** Lab ID: **H14120109-018AMS** Method: **SW7471B**
Analysis Date: **12/19/14 15:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.999	0.1114	112	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27412

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141219A: 16** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-018AMSD** Method: **SW7471B**
Analysis Date: **12/19/14 15:55** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	0.997	0.1114	110	80	120	1.232	1.5	20	

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 17** SampType: **Serial Dilution** Lab ID: **H14120109-018ADIL** Method: **SW7471B**
Analysis Date: **12/19/14 15:58** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.10	0.50		0		0	0	0.1114		10	

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 129** SampType: **Sample Matrix Spike** Lab ID: **H14120109-030AMS** Method: **SW7471B**
Analysis Date: **12/22/14 13:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.4	0.50	0.9901	0.3345	110	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Run ID :Run Order: **HGCV201-H_141219A: 130** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-030AMSD** Method: **SW7471B**
Analysis Date: **12/22/14 13:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/17/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.5	0.50	0.9921	0.3345	114	80	120	1.425	3.0	20	

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 73** SampType: **Method Blank** Lab ID: **MB-27432** Method: **SW6010B**

Analysis Date: **12/24/14 18:57** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1	0.3									
Barium	0.1	0.02									
Beryllium	ND	0.009									
Copper	ND	0.2									
Iron	5	0.6									
Manganese	0.09	0.02									
Nickel	0.1	0.07									
Vanadium	ND	0.1									
Zinc	2	0.09									

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICP2-HE_141224B: 76** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27432** Method: **SW6010B**

Analysis Date: **12/24/14 19:09** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	250	5.0	250	1.168	100	80	120				
Barium	49.0	1.0	50	0.112	98	80	120				
Beryllium	25.0	1.0	25	0	100	80	120				
Copper	48.7	1.0	50	0	97	80	120				
Iron	246	5.0	250	4.59	97	80	120				
Manganese	247	1.0	250	0.0905	99	80	120				
Nickel	48.9	1.0	50	0.114	98	80	120				
Vanadium	49.8	1.0	50	0	100	80	120				
Zinc	49.8	1.0	50	1.594	96	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 77** SampType: **Laboratory Control Sample** Lab ID: **LCS-27432** Method: **SW6010B**

Analysis Date: **12/24/14 19:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	14700	5.0	14850	1.168	99	50.7	131.3				
Barium	563	1.0	620.2	0.112	91	80.6	112.2				
Beryllium	46.5	1.0	51.52	0	90	76.3	108.6				
Copper	255	1.1	282.8	0	90	77.5	109.6				
Iron	20100	5.0	23230	4.59	86	39.6	138.3				
Manganese	363	1.0	372.7	0.0905	97	80.8	115.7				
Nickel	55.6	1.0	61.62	0.114	90	72.3	103.4				
Vanadium	68.8	1.0	73.74	0	93	66.6	107.3				
Zinc	196	1.0	215.2	1.594	90	74.2	109.9				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICP2-HE_141224B: 97** SampType: **Serial Dilution** Lab ID: **H14120110-009ADIL** Method: **SW6010B**

Analysis Date: **12/24/14 20:26** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9840	18		0		0	0	9554	2.9	10	
Barium	164	1.0		0		0	0	159.4	2.9	10	
Beryllium	1.14	1.0		0		0	0	0.9574		10	N
Copper	957	5.8		0		0	0	933.3	2.5	10	
Iron	18100	15		0		0	0	17150	5.3	10	
Manganese	869	1.0		0		0	0	834.7	4.0	10	
Nickel	8.72	1.8		0		0	0	9.486		10	N
Vanadium	43.1	3.9		0		0	0	43.45	0.9	10	
Zinc	1030	2.5		0		0	0	985.3	4.5	10	

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 100** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-009APDS** Method: **SW6010B**

Analysis Date: **12/24/14 20:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10800	5.0	1355	9554		75	125				A
Barium	410	1.0	271	159.4	93	75	125				
Beryllium	127	1.0	135.5	0.9574	93	75	125				
Copper	1180	1.2	271	933.3	90	75	125				
Iron	18000	5.0	1355	17150		75	125				A
Manganese	2060	1.0	1355	834.7	91	75	125				
Nickel	254	1.0	271	9.486	90	75	125				
Vanadium	298	1.0	271	43.45	94	75	125				
Zinc	1220	1.0	271	985.3	87	75	125				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICP2-HE_141224B: 101** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009AMS** Method: **SW6010B**

Analysis Date: **12/24/14 20:41** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10700	5.0	255.1	9554		75	125				A
Barium	220	1.0	51.02	159.4	119	75	125				
Beryllium	25.6	1.0	25.51	0.9574	97	75	125				
Copper	969	1.1	51.02	933.3		75	125				A
Iron	18600	5.0	255.1	17150		75	125				A
Manganese	1100	1.0	255.1	834.7	104	75	125				
Nickel	58.5	1.0	51.02	9.486	96	75	125				
Vanadium	99.0	1.0	51.02	43.45	109	75	125				
Zinc	1070	1.0	51.02	985.3		75	125				A

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 102** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW6010B**

Analysis Date: **12/24/14 20:45** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10700	5.0	257.7	9554		75	125	10700	0.4	20	A
Barium	221	1.0	51.55	159.4	120	75	125	220	0.6	20	
Beryllium	25.7	1.0	25.77	0.9574	96	75	125	25.63	0.2	20	
Copper	923	1.1	51.55	933.3		75	125	968.9	4.9	20	A
Iron	18100	5.0	257.7	17150		75	125	18630	2.9	20	A
Manganese	1100	1.0	257.7	834.7	104	75	125	1100	0.2	20	
Nickel	58.9	1.0	51.55	9.486	96	75	125	58.47	0.7	20	
Vanadium	96.5	1.0	51.55	43.45	103	75	125	99	2.5	20	
Zinc	1120	1.0	51.55	985.3		75	125	1070	4.4	20	A

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICP2-HE_141224B: 165** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009BMS** Method: **SW6010B**

Analysis Date: **12/24/14 20:41** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	27800	8.8	662.7	24820		75	125				A
Barium	571	1.0	132.5	414.2	119	75	125				
Beryllium	66.6	1.0	66.27	2.487	97	75	125				
Copper	2520	2.9	132.5	2424		75	125				A
Iron	48400	7.8	662.7	44550		75	125				A
Manganese	2860	1.0	662.7	2168	104	75	125				
Nickel	152	1.0	132.5	24.64	96	75	125				
Vanadium	257	2.0	132.5	112.9	109	75	125				
Zinc	2780	1.2	132.5	2560		75	125				A

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 166** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009BMSD** Method: **SW6010B**

Analysis Date: **12/24/14 20:45** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	27700	8.9	669.5	24820		75	125	27800	0.4	20	A
Barium	575	1.0	133.9	414.2	120	75	125	571.4	0.6	20	
Beryllium	66.7	1.0	66.95	2.487	96	75	125	66.57	0.2	20	
Copper	2400	2.9	133.9	2424		75	125	2517	4.9	20	A
Iron	47000	7.9	669.5	44550		75	125	48390	2.9	20	A
Manganese	2860	1.0	669.5	2168	104	75	125	2858	0.2	20	
Nickel	153	1.0	133.9	24.64	96	75	125	151.9	0.7	20	
Vanadium	251	2.0	133.9	112.9	103	75	125	257.2	2.5	20	
Zinc	2900	1.2	133.9	2560		75	125	2779	4.4	20	A

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 74** SampType: **Method Blank** Lab ID: **MB-27432** Method: **SW6020**

Analysis Date: **12/24/14 22:18** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICPMS204-B_141224B: 75** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27432** Method: **SW6020**

Analysis Date: **12/24/14 22:23** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.2	1.0	50	0	92	80	120				
Arsenic	49.8	1.0	50	0	100	80	120				
Boron	42.8	4.5	50	0	86	80	120				
Cadmium	24.9	1.0	25	0	100	80	120				
Chromium	49.3	1.0	50	0	99	80	120				
Cobalt	46.2	1.0	50	0	92	80	120				
Lead	45.3	1.0	50	0	91	80	120				
Molybdenum	44.7	1.0	50	0	89	80	120				
Selenium	55.0	1.0	50	0	110	80	120				
Silver	23.2	1.0	25	0	93	80	120				
Uranium	45.2	1.0	50	0	90	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 78** SampType: **Laboratory Control Sample** Lab ID: **LCS-27432** Method: **SW6020**

Analysis Date: **12/24/14 22:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.9	1.0	127.3	0	36	2.2	92.9				
Arsenic	312	1.0	346.5	0	90	72.3	106.4				
Boron	74.5	4.5	94.14	0	79	59.4	101.9				
Cadmium	127	1.0	138.4	0	92	73	105.1				
Chromium	78.2	1.0	76.77	0	102	72.8	109.1				
Cobalt	52.4	1.0	57.98	0	90	73.3	103.7				
Lead	186	1.0	188.9	0	99	75.9	108.6				
Molybdenum	152	1.0	173.7	0	87	68.6	105.8				
Selenium	208	1.0	198	0	105	72.5	112.2				
Silver	65.5	1.0	69.7	0	94	67.8	112.8				
Uranium	114	1.0	101	0	113	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICPMS204-B_141224B: 122** SampType: **Serial Dilution** Lab ID: **H14120110-009ADIL** Method: **SW6020**

Analysis Date: **12/25/14 02:08** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0		0		0	0	0.8505		10	
Arsenic	8.49	1.7		0		0	0	85.08		10	N
Boron	ND	24		0		0	0	0		10	
Cadmium	ND	1.0		0		0	0	3.795		10	
Chromium	2.72	1.1		0		0	0	24.29		10	N
Cobalt	0.525	1.0		0		0	0	4.366		10	N
Lead	23.3	1.2		0		0	0	220.3	160	10	R
Molybdenum	1.26	1.0		0		0	0	10.2		10	N
Selenium	ND	1.9		0		0	0	0.7095		10	
Silver	ND	1.4		0		0	0	3.876		10	
Uranium	ND	1.0		0		0	0	3.161		10	

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 123** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-009APDS** Method: **SW6020**

Analysis Date: **12/25/14 02:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2640	1.0	2632	0.8505	100	75	125				
Arsenic	2650	1.0	2632	85.08	97	75	125				
Boron	2430	4.7	2632	0	92	75	125				
Cadmium	1230	1.0	1316	3.795	93	75	125				
Chromium	2580	1.0	2632	24.29	97	75	125				
Cobalt	2410	1.0	2632	4.366	91	75	125				
Lead	2770	1.0	2632	220.3	97	75	125				
Molybdenum	2590	1.0	2632	10.2	98	75	125				
Selenium	2690	1.0	2632	0.7095	102	75	125				
Silver	160	1.0	1316	3.876	12	75	125				S
Uranium	2590	1.0	2632	3.161	98	75	125				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Run ID :Run Order: **ICPMS204-B_141224B: 124** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009AMS** Method: **SW6020**

Analysis Date: **12/25/14 02:17** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.6	1.0	51.02	0.8505	41	75	125				S
Arsenic	136	1.0	51.02	85.08	100	75	125				
Boron	61.6	4.6	51.02	0	121	75	125				
Cadmium	27.1	1.0	25.51	3.795	91	75	125				
Chromium	76.5	1.0	51.02	24.29	102	75	125				
Cobalt	49.8	1.0	51.02	4.366	89	75	125				
Lead	272	1.0	51.02	220.3		75	125				A
Molybdenum	55.8	1.0	51.02	10.2	89	75	125				
Selenium	56.6	1.0	51.02	0.7095	109	75	125				
Silver	26.5	1.0	25.51	3.876	89	75	125				
Uranium	48.9	1.0	51.02	3.161	90	75	125				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 125** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW6020**

Analysis Date: **12/25/14 02:22** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.5	1.0	51.55	0.8505	40	75	125	21.61	0.4	20	S
Arsenic	132	1.0	51.55	85.08	92	75	125	136.3	2.9	20	
Boron	55.6	4.6	51.55	0	108	75	125	61.58	10	20	
Cadmium	29.3	1.0	25.77	3.795	99	75	125	27.09	7.8	20	
Chromium	75.1	1.0	51.55	24.29	99	75	125	76.45	1.7	20	
Cobalt	54.0	1.0	51.55	4.366	96	75	125	49.8	8.0	20	
Lead	282	1.0	51.55	220.3		75	125	272.4	3.3	20	A
Molybdenum	59.7	1.0	51.55	10.2	96	75	125	55.84	6.7	20	
Selenium	54.4	1.0	51.55	0.7095	104	75	125	56.56	3.9	20	
Silver	29.2	1.0	25.77	3.876	98	75	125	26.53	9.6	20	
Uranium	52.8	1.0	51.55	3.161	96	75	125	48.93	7.6	20	

Associated samples: **H14120109-017A, H14120109-017B, H14120109-020A, H14120109-020B, H14120109-023A, H14120109-023B, H14120109-026A, H14120109-026B, H14120109-029A, H14120109-029B, H14120109-032A, H14120109-032B, H14120109-035A, H14120109-035B, H14120109-038A, H14120109-038B, H14120109-041A, H14120109-041B, H14120109-044A, H14120109-044B, H14120109-047A, H14120109-047B, H14120109-050A, H14120109-050B, H14120109-053A, H14120109-053B, H14120109-056A, H14120109-056B, H14120109-059A, H14120109-059B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 19** SampType: **Method Blank** Lab ID: **MB-27433** Method: **SW6010B**

Analysis Date: **12/23/14 13:59** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2	0.3									
Barium	0.2	0.02									
Beryllium	ND	0.009									
Boron	0.3	0.1									
Copper	2	0.2									
Iron	6	0.6									
Manganese	0.2	0.02									
Vanadium	ND	0.1									
Zinc	4	0.09									

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICP2-HE_141223B: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27433** Method: **SW6010B**

Analysis Date: **12/23/14 14:03** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	252	5.0	250	1.533	100	80	120				
Barium	49.5	1.0	50	0.1935	99	80	120				
Beryllium	24.9	1.0	25	0	100	80	120				
Boron	45.4	1.0	50	0.269	90	80	120				
Copper	48.9	1.0	50	2.002	94	80	120				
Iron	241	5.0	250	6.188	94	80	120				
Manganese	237	1.0	250	0.1575	95	80	120				
Vanadium	49.0	1.0	50	0	98	80	120				
Zinc	47.8	1.0	50	3.722	88	80	120				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6010B**

Analysis Date: **12/23/14 14:07** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13700	5.0	14700	1.533	93	50.7	131.3				
Barium	588	1.0	614	0.1935	96	80.6	112.2				
Beryllium	47.8	1.0	51	0	94	76.3	108.6				
Boron	75.1	1.0	93.2	0.269	80	59.4	101.9				
Copper	263	1.1	280	2.002	93	77.5	109.6				
Iron	19500	5.0	23000	6.188	85	39.6	138.3				
Manganese	374	1.0	369	0.1575	101	80.8	115.7				
Vanadium	65.7	1.0	73	0	90	66.6	107.3				
Zinc	199	1.0	213	3.722	91	74.2	109.9				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICP2-HE_141223B: 56** SampType: **Serial Dilution** Lab ID: **H14120110-010ADIL** Method: **SW6010B**

Analysis Date: **12/23/14 16:22** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4680	16		0		0	0	4516	3.5	10	
Barium	79.6	1.0		0		0	0	76.76	3.6	10	
Beryllium	0.236	1.0		0		0	0	0.2751		10	N
Boron	8.53	2.5		0		0	0	5.811		10	N
Copper	757	5.3		0		0	0	718.9	5.2	10	
Iron	52400	14		0		0	0	47470	9.8	10	
Manganese	1750	1.0		0		0	0	1636	7.0	10	
Vanadium	79.6	3.6		0		0	0	77.47	2.8	10	
Zinc	1010	2.2		0		0	0	950.6	5.7	10	

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 57** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-010APDS** Method: **SW6010B**

Analysis Date: **12/23/14 16:26** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5840	5.0	1232	4516	107	75	125				
Barium	308	1.0	246.4	76.76	94	75	125				
Beryllium	116	1.0	123.2	0.2751	94	75	125				
Boron	244	1.0	246.4	5.811	96	75	125				
Copper	971	1.1	246.4	718.9	102	75	125				
Iron	50400	5.0	1232	47470		75	125				A
Manganese	2820	1.0	1232	1636	96	75	125				
Vanadium	309	1.0	246.4	77.47	94	75	125				
Zinc	1230	1.0	246.4	950.6	115	75	125				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICP2-HE_141223B: 58** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010AMS** Method: **SW6010B**

Analysis Date: **12/23/14 16:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5040	5.0	238.5	4516		75	125				A
Barium	106	1.0	47.71	76.76	62	75	125				S
Beryllium	23.6	1.0	23.85	0.2751	98	75	125				
Boron	45.4	1.0	47.71	5.811	83	75	125				
Copper	675	1.0	47.71	718.9		75	125				A
Iron	48800	5.0	238.5	47470		75	125				A
Manganese	838	1.0	238.5	1636		75	125				A
Vanadium	116	1.0	47.71	77.47	82	75	125				
Zinc	1150	1.0	47.71	950.6		75	125				A

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 59** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010AMSD** Method: **SW6010B**

Analysis Date: **12/23/14 16:33** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5240	5.0	243.4	4516		75	125	5036	4.1	20	A
Barium	110	1.0	48.69	76.76	68	75	125	106.2	3.3	20	S
Beryllium	24.0	1.0	24.34	0.2751	97	75	125	23.57	1.8	20	
Boron	46.8	1.0	48.69	5.811	84	75	125	45.41	3.1	20	
Copper	701	1.1	48.69	718.9		75	125	674.7	3.8	20	A
Iron	47000	5.0	243.4	47470		75	125	48850	3.8	20	A
Manganese	959	1.0	243.4	1636		75	125	837.8	14	20	A
Vanadium	115	1.0	48.69	77.47	78	75	125	116.4	0.9	20	
Zinc	932	1.0	48.69	950.6		75	125	1152	21	20	AR

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICP2-HE_141223B: 94** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010BMS** Method: **SW6010B**

Analysis Date: **12/23/14 16:29** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6300	5.0	298.3	5647		75	125				A
Barium	133	1.0	59.67	95.99	62	75	125				S
Beryllium	29.5	1.0	29.83	0.3441	98	75	125				
Boron	56.8	1.0	59.67	7.267	83	75	125				
Copper	844	1.3	59.67	899.1		75	125				A
Iron	61100	5.0	298.3	59370		75	125				A
Manganese	1050	1.0	298.3	2046		75	125				A
Vanadium	146	1.0	59.67	96.89	82	75	125				
Zinc	1440	1.0	59.67	1189		75	125				A

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 95** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010BMSD** Method: **SW6010B**

Analysis Date: **12/23/14 16:33** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6560	5.0	304.4	5647		75	125	6298	4.1	20	A
Barium	137	1.0	60.89	95.99	68	75	125	132.8	3.3	20	S
Beryllium	30.0	1.0	30.44	0.3441	97	75	125	29.47	1.8	20	
Boron	58.6	1.0	60.89	7.267	84	75	125	56.79	3.1	20	
Copper	877	1.3	60.89	899.1		75	125	843.8	3.8	20	A
Iron	58800	5.0	304.4	59370		75	125	61090	3.8	20	A
Manganese	1200	1.0	304.4	2046		75	125	1048	14	20	A
Vanadium	144	1.0	60.89	96.89	78	75	125	145.6	0.9	20	
Zinc	1170	1.0	60.89	1189		75	125	1441	21	20	AR

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 17** SampType: **Method Blank** Lab ID: **MB-27433** Method: **SW6020**

Analysis Date: **12/24/14 17:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Nickel	ND	0.9									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICPMS204-B_141224B: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27433** Method: **SW6020**

Analysis Date: **12/24/14 17:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.9	1.0	50	0	96	80	120				
Arsenic	47.8	1.0	50	0	96	80	120				
Cadmium	25.4	1.0	25	0	102	80	120				
Chromium	47.8	1.0	50	0	96	80	120				
Cobalt	47.4	1.0	50	0	95	80	120				
Lead	47.4	1.0	50	0	95	80	120				
Molybdenum	47.4	1.0	50	0	95	80	120				
Nickel	50.0	1.0	50	0	100	80	120				
Selenium	51.1	1.0	50	0	102	80	120				
Silver	23.8	1.0	25	0	95	80	120				
Uranium	47.2	1.0	50	0	95	80	120				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6020**

Analysis Date: **12/24/14 18:07** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.7	1.0	126	0	37	2.2	92.9				
Arsenic	321	1.0	343	0	94	72.3	106.4				
Cadmium	141	1.0	137	0	103	73	105.1				
Chromium	77.7	1.0	76	0	102	72.8	109.1				
Cobalt	59.2	1.0	57.4	0	103	73.3	103.7				
Lead	203	1.0	187	0	108	75.9	108.6				
Molybdenum	159	1.0	172	0	92	68.6	105.8				
Nickel	62.6	1.0	61	0	103	72.3	103.4				
Selenium	210	1.0	196	0	107	72.5	112.2				
Silver	70.6	1.0	69	0	102	67.8	112.8				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICPMS204-B_141224B: 48** SampType: **Serial Dilution** Lab ID: **H14120110-010ADIL** Method: **SW6020**

Analysis Date: **12/24/14 20:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.620	1.0		0		0	0	0.7555		10	N
Arsenic	87.5	1.5		0		0	0	88.9	1.6	10	
Cadmium	2.61	1.0		0		0	0	2.5		10	N
Chromium	23.9	1.0		0		0	0	23.46	2.1	10	
Cobalt	10.2	1.0		0		0	0	10.2	0.5	10	
Lead	138	1.1		0		0	0	136.3	1.1	10	
Molybdenum	2.53	1.0		0		0	0	2.538		10	N
Nickel	9.16	4.4		0		0	0	9.206		10	N
Selenium	ND	1.7		0		0	0	1.292		10	
Silver	2.96	1.3		0		0	0	3.019		10	N
Uranium	2.62	1.0		0		0	0	2.653		10	N

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 49** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-010APDS** Method: **SW6020**

Analysis Date: **12/24/14 20:20** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2350	1.0	2392	0.7555	98	75	125				
Arsenic	2340	1.0	2392	88.9	94	75	125				
Cadmium	1150	1.0	1196	2.5	96	75	125				
Chromium	2260	1.0	2392	23.46	93	75	125				
Cobalt	2180	1.0	2392	10.2	91	75	125				
Lead	2420	1.0	2392	136.3	95	75	125				
Molybdenum	2320	1.0	2392	2.538	97	75	125				
Nickel	2270	1.0	2392	9.206	94	75	125				
Selenium	2330	1.0	2392	1.292	97	75	125				
Silver	809	1.0	1196	3.019	67	75	125				S
Uranium	2370	1.0	2392	2.653	99	75	125				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICPMS204-B_141224B: 50** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010AMS** Method: **SW6020**

Analysis Date: **12/24/14 20:24** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	33.5	1.0	47.71	0.7555	69	75	125				S
Arsenic	128	1.0	47.71	88.9	81	75	125				
Cadmium	27.4	1.0	23.85	2.5	104	75	125				
Chromium	70.1	1.0	47.71	23.46	98	75	125				
Cobalt	57.8	1.0	47.71	10.2	100	75	125				
Lead	182	1.0	47.71	136.3	96	75	125				
Molybdenum	51.4	1.0	47.71	2.538	102	75	125				
Nickel	58.7	1.0	47.71	9.206	104	75	125				
Selenium	53.7	1.0	47.71	1.292	110	75	125				
Silver	27.2	1.0	23.85	3.019	102	75	125				
Uranium	48.9	1.0	47.71	2.653	97	75	125				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010AMSD** Method: **SW6020**

Analysis Date: **12/24/14 20:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	29.4	1.0	48.69	0.7555	59	75	125	33.52	13	20	S
Arsenic	131	1.0	48.69	88.9	86	75	125	127.6	2.5	20	
Cadmium	27.1	1.0	24.34	2.5	101	75	125	27.39	1.1	20	
Chromium	70.1	1.0	48.69	23.46	96	75	125	70.09	0.0	20	
Cobalt	57.2	1.0	48.69	10.2	96	75	125	57.82	1.1	20	
Lead	206	1.0	48.69	136.3	143	75	125	182.3	12	20	S
Molybdenum	50.8	1.0	48.69	2.538	99	75	125	51.41	1.1	20	
Nickel	58.9	1.0	48.69	9.206	102	75	125	58.66	0.4	20	
Selenium	53.2	1.0	48.69	1.292	107	75	125	53.75	0.9	20	
Silver	28.1	1.0	24.34	3.019	103	75	125	27.24	3.0	20	
Uranium	51.3	1.0	48.69	2.653	100	75	125	48.9	4.9	20	

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICPMS204-B_141229A: 18** SampType: **Method Blank** Lab ID: **MB-27433** Method: **SW6020**

Analysis Date: **12/29/14 12:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	0.2	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Nickel	ND	0.9									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141229A: 19** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6020**

Analysis Date: **12/29/14 12:19** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	119	1.0	100	0	119	80	120				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 103** SampType: **Method Blank** Lab ID: **MB-27434** Method: **SW6010B**

Analysis Date: **12/24/14 20:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.5	0.02									
Beryllium	0.010	0.009									
Boron	ND	0.1									
Copper	ND	0.2									
Iron	3	0.6									
Manganese	0.08	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.8	0.09									

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICP2-HE_141224B: 104** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27434** Method: **SW6010B**

Analysis Date: **12/24/14 20:52** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	250	5.0	250	0	100	80	120				
Barium	49.1	1.0	50	0.518	97	80	120				
Beryllium	24.8	1.0	25	0.0095	99	80	120				
Boron	48.8	1.0	50	0	98	80	120				
Copper	48.5	1.0	50	0	97	80	120				
Iron	245	5.0	250	3	97	80	120				
Manganese	244	1.0	250	0.079	98	80	120				
Nickel	49.0	1.0	50	0	98	80	120				
Vanadium	49.3	1.0	50	0	99	80	120				
Zinc	49.5	1.0	50	0.844	97	80	120				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 105** SampType: **Laboratory Control Sample** Lab ID: **LCS-27434** Method: **SW6010B**

Analysis Date: **12/24/14 20:56** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13600	5.0	14000	0	97	50.7	131.3				
Barium	547	1.0	584.8	0.518	94	80.6	112.2				
Beryllium	44.8	1.0	48.57	0.0095	92	76.3	108.6				
Boron	74.0	1.0	88.76	0	83	59.4	101.9				
Copper	245	1.0	266.7	0	92	77.5	109.6				
Iron	18600	5.0	21900	3	85	39.6	138.3				
Manganese	367	1.0	351.4	0.079	104	80.8	115.7				
Nickel	52.4	1.0	58.1	0	90	72.3	103.4				
Vanadium	64.3	1.0	69.52	0	92	66.6	107.3				
Zinc	188	1.0	202.9	0.844	92	74.2	109.9				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICP2-HE_141224B: 134** SampType: **Serial Dilution** Lab ID: **H14120110-011ADIL** Method: **SW6010B**

Analysis Date: **12/24/14 22:44** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3440	18		0		0	0	3395	1.2	10	
Barium	37.9	1.0		0		0	0	36.84	2.8	10	
Beryllium	0.421	1.0		0		0	0	0.3679		10	N
Boron	5.74	2.7		0		0	0	1.914		10	N
Copper	531	5.8		0		0	0	517.7	2.6	10	
Iron	12700	15		0		0	0	12330	3.0	10	
Manganese	2290	1.0		0		0	0	2226	3.0	10	
Nickel	7.73	1.8		0		0	0	4.053		10	N
Vanadium	24.1	3.9		0		0	0	25.56		10	N
Zinc	662	2.5		0		0	0	670.4	1.2	10	

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 135** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-011APDS** Method: **SW6010B**

Analysis Date: **12/24/14 22:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4730	5.0	1355	3395	98	75	125				
Barium	296	1.0	271	36.84	95	75	125				
Beryllium	131	1.0	135.5	0.3679	96	75	125				
Boron	260	1.0	271	1.914	95	75	125				
Copper	775	1.2	271	517.7	95	75	125				
Iron	13300	5.0	1355	12330		75	125				A
Manganese	3480	1.0	1355	2226	92	75	125				
Nickel	260	1.0	271	4.053	94	75	125				
Vanadium	288	1.0	271	25.56	97	75	125				
Zinc	900	1.0	271	670.4	85	75	125				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICP2-HE_141224B: 136** SampType: **Sample Matrix Spike** Lab ID: **H14120110-011AMS** Method: **SW6010B**

Analysis Date: **12/24/14 22:52** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4920	5.0	263.2	3395		75	125				A
Barium	109	1.0	52.63	36.84	137	75	125				S
Beryllium	26.8	1.0	26.32	0.3679	101	75	125				
Boron	50.9	1.0	52.63	1.914	93	75	125				
Copper	1230	1.2	52.63	517.7		75	125				A
Iron	12100	5.0	263.2	12330		75	125				A
Manganese	542	1.0	263.2	2226		75	125				A
Nickel	54.6	1.0	52.63	4.053	96	75	125				
Vanadium	70.1	1.0	52.63	25.56	85	75	125				
Zinc	1730	1.0	52.63	670.4		75	125				A

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 137** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011AMSD** Method: **SW6010B**

Analysis Date: **12/24/14 22:55** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4740	5.0	263.2	3395		75	125	4920	3.8	20	A
Barium	271	1.0	52.63	36.84	446	75	125	108.9	85	20	SR
Beryllium	26.6	1.0	26.32	0.3679	100	75	125	26.82	0.9	20	
Boron	52.0	1.0	52.63	1.914	95	75	125	50.93	2.0	20	
Copper	566	1.2	52.63	517.7		75	125	1234	74	20	AR
Iron	12800	5.0	263.2	12330		75	125	12070	6.2	20	A
Manganese	3090	1.0	263.2	2226		75	125	542.4	140	20	AR
Nickel	54.1	1.0	52.63	4.053	95	75	125	54.59	0.9	20	
Vanadium	83.0	1.0	52.63	25.56	109	75	125	70.12	17	20	
Zinc	834	1.0	52.63	670.4		75	125	1733	70	20	AR

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICP2-HE_141224B: 197** SampType: **Sample Matrix Spike** Lab ID: **H14120110-011BMS** Method: **SW6010B**

Analysis Date: **12/24/14 22:52** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5990	5.0	320.3	4132		75	125				A
Barium	133	1.0	64.06	44.83	137	75	125				S
Beryllium	32.6	1.0	32.03	0.4478	101	75	125				
Boron	62.0	1.0	64.06	2.33	93	75	125				
Copper	1500	1.4	64.06	630.1		75	125				A
Iron	14700	5.0	320.3	15000		75	125				A
Manganese	660	1.0	320.3	2710		75	125				A
Nickel	66.4	1.0	64.06	4.933	96	75	125				
Vanadium	85.3	1.0	64.06	31.11	85	75	125				
Zinc	2110	1.0	64.06	815.9		75	125				A

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 198** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011BMSD** Method: **SW6010B**

Analysis Date: **12/24/14 22:55** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5770	5.0	320.3	4132		75	125	5989	3.8	20	A
Barium	330	1.0	64.06	44.83	446	75	125	132.5	85	20	SR
Beryllium	32.3	1.0	32.03	0.4478	100	75	125	32.65	0.9	20	
Boron	63.3	1.0	64.06	2.33	95	75	125	61.99	2.0	20	
Copper	689	1.4	64.06	630.1		75	125	1501	74	20	AR
Iron	15600	5.0	320.3	15000		75	125	14690	6.2	20	A
Manganese	3760	1.0	320.3	2710		75	125	660.2	140	20	AR
Nickel	65.8	1.0	64.06	4.933	95	75	125	66.44	0.9	20	
Vanadium	101	1.0	64.06	31.11	109	75	125	85.34	17	20	
Zinc	1010	1.0	64.06	815.9		75	125	2109	70	20	AR

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 130** SampType: **Method Blank** Lab ID: **MB-27434** Method: **SW6020**

Analysis Date: **12/25/14 02:46** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.1	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICPMS204-B_141224B: 131** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27434** Method: **SW6020**

Analysis Date: **12/25/14 02:51** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.9	1.0	50	0.1358	95	80	120				
Arsenic	48.0	1.0	50	0	96	80	120				
Cadmium	25.1	1.0	25	0	100	80	120				
Chromium	48.0	1.0	50	0	96	80	120				
Cobalt	47.3	1.0	50	0	95	80	120				
Lead	47.1	1.0	50	0	94	80	120				
Molybdenum	46.4	1.0	50	0	93	80	120				
Selenium	50.7	1.0	50	0	101	80	120				
Silver	23.8	1.0	25	0	95	80	120				
Uranium	45.9	1.0	50	0	92	80	120				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 134** SampType: **Laboratory Control Sample** Lab ID: **LCS-27434** Method: **SW6020**

Analysis Date: **12/25/14 03:05** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	43.2	1.0	120	0.1358	36	2.2	92.9				
Arsenic	304	1.0	326.7	0	93	72.3	106.4				
Cadmium	126	1.0	130.5	0	97	73	105.1				
Chromium	75.2	1.0	72.38	0	104	72.8	109.1				
Cobalt	54.0	1.0	54.67	0	99	73.3	103.7				
Lead	187	1.0	178.1	0	105	75.9	108.6				
Molybdenum	149	1.0	163.8	0	91	68.6	105.8				
Selenium	192	1.0	186.7	0	103	72.5	112.2				
Silver	67.3	1.0	65.71	0	102	67.8	112.8				
Uranium	114	1.0	95.24	0	119	80	120				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICPMS204-B_141224B: 161** SampType: **Serial Dilution** Lab ID: **H14120110-011ADIL** Method: **SW6020**

Analysis Date: **12/25/14 05:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.48	1.0		0		0	0	2.705		10	N
Arsenic	123	1.7		0		0	0	122	0.5	10	
Cadmium	1.10	1.0		0		0	0	1.113		10	N
Chromium	7.98	1.1		0		0	0	7.789		10	N
Cobalt	2.31	1.0		0		0	0	2.383		10	N
Lead	106	1.2		0		0	0	105	0.5	10	
Molybdenum	1.19	1.0		0		0	0	1.209		10	N
Selenium	ND	1.9		0		0	0	0		10	
Silver	2.50	1.4		0		0	0	2.653		10	N
Uranium	2.57	1.0		0		0	0	2.491		10	N

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 162** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-011APDS** Method: **SW6020**

Analysis Date: **12/25/14 05:20** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2660	1.0	2632	2.705	101	75	125				
Arsenic	2580	1.0	2632	122	94	75	125				
Cadmium	1300	1.0	1316	1.113	99	75	125				
Chromium	2500	1.0	2632	7.789	95	75	125				
Cobalt	2420	1.0	2632	2.383	92	75	125				
Lead	2680	1.0	2632	105	98	75	125				
Molybdenum	2600	1.0	2632	1.209	99	75	125				
Selenium	2500	1.0	2632	0	95	75	125				
Silver	841	1.0	1316	2.653	64	75	125				S
Uranium	2640	1.0	2632	2.491	100	75	125				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICPMS204-B_141224B: 163** SampType: **Sample Matrix Spike** Lab ID: **H14120110-011AMS** Method: **SW6020**

Analysis Date: **12/25/14 05:24** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	34.4	1.0	52.63	2.705	60	75	125				S
Arsenic	166	1.0	52.63	122	84	75	125				
Cadmium	32.2	1.0	26.32	1.113	118	75	125				
Chromium	58.8	1.0	52.63	7.789	97	75	125				
Cobalt	54.3	1.0	52.63	2.383	99	75	125				
Lead	306	1.0	52.63	105	383	75	125				S
Molybdenum	52.7	1.0	52.63	1.209	98	75	125				
Selenium	59.0	1.0	52.63	0	112	75	125				
Silver	30.7	1.0	26.32	2.653	107	75	125				
Uranium	52.6	1.0	52.63	2.491	95	75	125				

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 164** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011AMSD** Method: **SW6020**

Analysis Date: **12/25/14 05:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	31.5	1.0	52.63	2.705	55	75	125	34.42	8.8	20	S
Arsenic	174	1.0	52.63	122	98	75	125	166.2	4.4	20	
Cadmium	28.1	1.0	26.32	1.113	103	75	125	32.18	13	20	
Chromium	59.2	1.0	52.63	7.789	98	75	125	58.79	0.7	20	
Cobalt	55.8	1.0	52.63	2.383	102	75	125	54.26	2.9	20	
Lead	355	1.0	52.63	105	476	75	125	306.3	15	20	S
Molybdenum	54.9	1.0	52.63	1.209	102	75	125	52.68	4.1	20	
Selenium	55.8	1.0	52.63	0	106	75	125	59	5.6	20	
Silver	29.1	1.0	26.32	2.653	100	75	125	30.71	5.5	20	
Uranium	54.1	1.0	52.63	2.491	98	75	125	52.55	3.0	20	

Associated samples: **H14120109-019A, H14120109-019B, H14120109-022A, H14120109-022B, H14120109-025A, H14120109-025B, H14120109-028A, H14120109-028B, H14120109-031A, H14120109-031B, H14120109-034A, H14120109-034B, H14120109-037A, H14120109-037B, H14120109-040A, H14120109-040B, H14120109-043A, H14120109-043B, H14120109-046A, H14120109-046B, H14120109-049A, H14120109-049B, H14120109-052A, H14120109-052B, H14120109-055A, H14120109-055B, H14120109-058A, H14120109-058B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27464

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141226A: 11** SampType: **Method Blank** Lab ID: **MB-27464** Method: **SW7471B**
Analysis Date: **12/26/14 14:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.002	0.0003									

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 12** SampType: **Laboratory Control Sample** Lab ID: **LCS-27464** Method: **SW7471B**
Analysis Date: **12/26/14 14:55** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.7	0.50	5	0.001876	113	80	120				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 13** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27464** Method: **SW7471B**
Analysis Date: **12/26/14 14:57** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	1	0.001876	120	80	120				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 31** SampType: **Sample Matrix Spike** Lab ID: **H14120109-035AMS** Method: **SW7471B**
Analysis Date: **12/26/14 15:50** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.6	0.50	0.994	0.5321	107	80	120				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27464

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141226A: 32** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-035AMSD** Method: **SW7471B**
Analysis Date: **12/26/14 15:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.7	0.50	0.995	0.5321	114	80	120	1.595	4.1	20	

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-045AMSD** Method: **SW7471B**
Analysis Date: **12/26/14 16:18** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	1	0.1593	110	80	120	1.157	8.5	20	

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Run ID :Run Order: **HGCV201-H_141226A: 42** SampType: **Sample Matrix Spike** Lab ID: **H14120109-045AMS** Method: **SW7471B**
Analysis Date: **12/26/14 16:23** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.2	0.50	1	0.1593	100	80	120				

Associated samples: **H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27465

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141226B: 10** SampType: **Method Blank** Lab ID: **MB-27465** Method: **SW7471B**
Analysis Date: **12/26/14 12:33** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0003									

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-27465** Method: **SW7471B**
Analysis Date: **12/26/14 12:35** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.0	0.50	5	0	100	80	120				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 12** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27465** Method: **SW7471B**
Analysis Date: **12/26/14 12:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1	0	113	80	120				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 27** SampType: **Sample Matrix Spike** Lab ID: **H14120109-055AMS** Method: **SW7471B**
Analysis Date: **12/26/14 13:17** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.9872	0.106	120	80	120				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-055AMSD** Method: **SW7471B**
Analysis Date: **12/26/14 13:19** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.9872	0.106	124	80	120	1.295	2.4	20	S

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27465

Date: *06-Jan-15*

Run ID :Run Order: **HGCV201-H_141226B: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-055AMSD** Method: **SW7471B**

Analysis Date: **12/26/14 13:19** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 41** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009AMS** Method: **SW7471B**

Analysis Date: **12/26/14 13:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.6	0.50	0.993	0.4772	117	80	120				

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **HGCV201-H_141226B: 42** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW7471B**

Analysis Date: **12/26/14 13:56** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.8	0.50	0.9921	0.4772	138	80	120	1.643	11	20	S

Associated samples: **H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102682

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141208A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**
Analysis Date: **12/08/14 08:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.763	0.10	0.8	0	95	95	105				
Calcium	39.8	1.0	40	0	100	95	105				
Magnesium	39.2	1.0	40	0	98	95	105				
Potassium	39.6	1.0	40	0	99	95	105				
Sodium	39.5	1.0	40	0	99	95	105				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**
Analysis Date: **12/08/14 08:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.48	0.10	2.5	0	99	95	105				
Calcium	25.3	1.0	25	0	101	95	105				
Magnesium	24.6	1.0	25	0	99	95	105				
Potassium	24.8	1.0	25	0	99	95	105				
Sodium	24.9	1.0	25	0	100	95	105				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **12/08/14 09:07** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.00479	0.10		0		0	0				
Calcium	474	1.0	500	0	95	80	120				
Magnesium	502	1.0	500	0	100	80	120				
Potassium	-0.131	1.0		0		0	0				
Sodium	0.0463	1.0		0		0	0				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **12/08/14 09:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.964	0.10	1	0	96	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102682

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141208A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **12/08/14 09:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	467	1.0	500	0	93	80	120				
Magnesium	501	1.0	500	0	100	80	120				
Potassium	20.3	1.0	20	0	102	80	120				
Sodium	20.4	1.0	20	0	102	80	120				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**
Analysis Date: **12/08/14 09:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	ND	0.002									
Calcium	0.05	0.03									
Magnesium	ND	0.04									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**
Analysis Date: **12/08/14 09:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.933	0.10	1	0	93	85	115				
Calcium	48.7	1.0	50	0.04895	97	85	115				
Magnesium	47.6	1.0	50	0	95	85	115				
Potassium	48.0	1.0	50	0	96	85	115				
Sodium	47.8	1.0	50	0	96	85	115				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 29** SampType: **Sample Matrix Spike** Lab ID: **H14120052-002BMS2** Method: **E200.7**
Analysis Date: **12/08/14 11:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	5.84	0.050	5	1.04	96	70	130				
Calcium	265	1.0	250	12.18	101	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102682

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141208A: 29** SampType: **Sample Matrix Spike** Lab ID: **H14120052-002BMS2** Method: **E200.7**
Analysis Date: **12/08/14 11:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	258	1.0	250	4.183	101	70	130				
Potassium	264	1.0	250	8.096	103	70	130				
Sodium	2710	2.6	250	2755		70	130				A

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 30** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120052-002BMSD2** Method: **E200.7**
Analysis Date: **12/08/14 11:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	5.92	0.050	5	1.04	98	70	130	5.838	1.5	20	
Calcium	257	1.0	250	12.18	98	70	130	265.1	2.9	20	
Magnesium	248	1.0	250	4.183	98	70	130	257.7	3.7	20	
Potassium	263	1.0	250	8.096	102	70	130	264.4	0.5	20	
Sodium	2990	2.6	250	2755		70	130	2712	9.8	20	A

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 32** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **12/08/14 11:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.52	0.10	2.5	0	101	90	110				
Calcium	25.7	1.0	25	0	103	90	110				
Magnesium	25.3	1.0	25	0	101	90	110				
Potassium	25.9	1.0	25	0	103	90	110				
Sodium	25.7	1.0	25	0	103	90	110				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **12/08/14 13:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.48	0.10	2.5	0	99	90	110				
Calcium	25.3	1.0	25	0	101	90	110				
Magnesium	25.0	1.0	25	0	100	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102682

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141208A: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **12/08/14 13:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	24.1	1.0	25	0	96	90	110				
Sodium	24.1	1.0	25	0	97	90	110				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 53** SampType: **Sample Matrix Spike** Lab ID: **H14120109-007BMS2** Method: **E200.7**
Analysis Date: **12/08/14 13:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.07	0.050	1	0.06315	101	70	130				
Calcium	113	1.0	50	62.1	103	70	130				
Magnesium	64.7	1.0	50	13.13	103	70	130				
Potassium	57.3	1.0	50	6.533	101	70	130				
Sodium	84.0	1.0	50	33.58	101	70	130				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 54** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-007BMSD2** Method: **E200.7**
Analysis Date: **12/08/14 13:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.10	0.050	1	0.06315	103	70	130	1.07	2.5	20	
Calcium	115	1.0	50	62.1	105	70	130	113.4	1.0	20	
Magnesium	66.2	1.0	50	13.13	106	70	130	64.74	2.2	20	
Potassium	59.0	1.0	50	6.533	105	70	130	57.26	2.9	20	
Sodium	85.6	1.0	50	33.58	104	70	130	83.99	1.9	20	

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 63** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **12/08/14 13:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.49	0.10	2.5	0	100	90	110				
Calcium	25.4	1.0	25	0	101	90	110				
Magnesium	25.3	1.0	25	0	101	90	110				
Potassium	24.6	1.0	25	0	98	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102682

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141208A: 63** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **12/08/14 13:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	24.6	1.0	25	0	98	90	110				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 69** SampType: **Sample Matrix Spike** Lab ID: **H14120032-001DMS2** Method: **E200.7**

Analysis Date: **12/08/14 14:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.09	0.050	1	0.1291	97	70	130				
Calcium	83.1	1.0	50	34.26	98	70	130				
Magnesium	57.8	1.0	50	7.95	100	70	130				
Potassium	59.4	1.0	50	9.76	99	70	130				
Sodium	94.1	1.0	50	45.02	98	70	130				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICP2-HE_141208A: 70** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120032-001DMSD2** Method: **E200.7**

Analysis Date: **12/08/14 14:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 5	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	1.10	0.050	1	0.1291	97	70	130	1.095	0.1	20	
Calcium	82.6	1.0	50	34.26	97	70	130	83.07	0.6	20	
Magnesium	57.4	1.0	50	7.95	99	70	130	57.79	0.6	20	
Potassium	59.1	1.0	50	9.76	99	70	130	59.44	0.6	20	
Sodium	93.9	1.0	50	45.02	98	70	130	94.13	0.2	20	

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102687

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141208A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **12/08/14 10:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.02	0.010	1	0	102	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **12/08/14 10:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.975	0.011	1	0	97	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **12/08/14 10:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.00363	0.010		0		0	0				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **12/08/14 10:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.007	0.001									

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 55** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **12/08/14 11:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.513	0.010	0.5	0	103	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102687

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141208A: 57** SampType: **Sample Matrix Spike** Lab ID: **H14120107-013CMS** Method: **E353.2**
Analysis Date: **12/08/14 11:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.943	0.011	1	0.01194	93	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 58** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120107-013CMSD** Method: **E353.2**
Analysis Date: **12/08/14 11:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.956	0.011	1	0.01194	94	90	110	0.9432	1.4	20	

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 69** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **12/08/14 12:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.515	0.010	0.5	0	103	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 83** SampType: **Sample Matrix Spike** Lab ID: **H14120109-007DMS** Method: **E353.2**
Analysis Date: **12/08/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	3.71	0.022	2	1.732	99	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 84** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-007DMSD** Method: **E353.2**
Analysis Date: **12/08/14 12:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	3.67	0.022	2	1.732	97	90	110	3.711	1.2	20	

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102687

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141208A: 86** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**

Analysis Date: **12/08/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.519	0.010	0.5	0	104	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 88** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001DMS** Method: **E353.2**

Analysis Date: **12/08/14 12:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.01	0.011	1	0	101	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208A: 89** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001DMSD** Method: **E353.2**

Analysis Date: **12/08/14 12:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.03	0.011	1	0	103	90	110	1.015	1.6	20	

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102699

Date: *06-Jan-15*

Run ID :Run Order: **FIA202-HE_141208A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**
Analysis Date: **12/08/14 13:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.248	0.010	0.25	0	99	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**
Analysis Date: **12/08/14 14:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-4.92E-05	0.010		0		0	0				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 56** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **12/08/14 14:49** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0964	0.010	0.1	0	96	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 70** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **12/08/14 15:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0974	0.010	0.1	0	97	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Run ID :Run Order: **FIA202-HE_141208A: 89** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **12/08/14 15:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0945	0.010	0.1	0	94	90	110				

Associated samples: **H14120109-001D, H14120109-002D, H14120109-003D, H14120109-004D, H14120109-005D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D, H14120109-016D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102706

Date: *06-Jan-15*

Run ID :Run Order: **IC102-H_141208A: 13** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **12/08/14 10:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100	0	102	90	110				
Sulfate	400	1.0	400	0	101	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 14** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **12/08/14 11:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	0.09	0.008									
Sulfate	0.2	0.08									

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 15** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **12/08/14 11:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	47	1.0	50	0.093	94	90	110				
Sulfate	200	1.0	200	0.246	98	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 59** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV120814-4** Method: **E300.0**
Analysis Date: **12/08/14 19:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100	0	101	90	110				
Sulfate	410	1.0	400	0	102	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 62** SampType: **Sample Matrix Spike** Lab ID: **H14120107-016AMS** Method: **E300.0**
Analysis Date: **12/08/14 19:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	260	1.0	250	18.01	97	90	110				
Sulfate	1700	1.0	1000	719.5	102	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102706

Date: *06-Jan-15*

Run ID :Run Order: **IC102-H_141208A: 62** SampType: **Sample Matrix Spike** Lab ID: **H14120107-016AMS** Method: **E300.0**
Analysis Date: **12/08/14 19:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 63** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120107-016AMSD** Method: **E300.0**
Analysis Date: **12/08/14 20:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	260	1.0	250	18.01	98	90	110	261.3	0.9	20	
Sulfate	1700	1.0	1000	719.5	103	90	110	1741	0.3	20	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 73** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV120814-5** Method: **E300.0**
Analysis Date: **12/08/14 22:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100	0	103	90	110				
Sulfate	410	1.0	400	0	103	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 76** SampType: **Sample Matrix Spike** Lab ID: **H14120109-010AMS** Method: **E300.0**
Analysis Date: **12/08/14 22:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	50	48.77	104	90	110				
Sulfate	310	1.0	200	98.6	108	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 77** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-010AMSD** Method: **E300.0**
Analysis Date: **12/08/14 22:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	50	48.77	105	90	110	100.6	0.4	20	
Sulfate	310	1.0	200	98.6	105	90	110	313.6	1.7	20	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102706

Date: *06-Jan-15*

Run ID :Run Order: **IC102-H_141208A: 90** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004AMS** Method: **E300.0**

Analysis Date: **12/09/14 01:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	76	1.0	50	24.09	103	90	110				
Sulfate	240	1.0	200	28.76	104	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **IC102-H_141208A: 91** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004AMSD** Method: **E300.0**

Analysis Date: **12/09/14 01:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	77	1.0	50	24.09	106	90	110	75.77	1.4	20	
Sulfate	240	1.0	200	28.76	104	90	110	237	0.2	20	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102707

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141208C: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **12/08/14 15:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	14.6	0.50	15.2	0	96	90	110				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **12/08/14 15:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.910	0.055	1	0	91	90	110				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **12/08/14 15:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0768	0.050		0		0	0				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 37** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **12/08/14 15:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.472	0.050	0.5	0	94	90	110				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 40** SampType: **Sample Matrix Spike** Lab ID: **H14120106-011DMS** Method: **E350.1**
Analysis Date: **12/08/14 15:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.925	0.055	1	0.05222	87	80	120				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 41** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120106-011DMSD** Method: **E350.1**
Analysis Date: **12/08/14 15:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.911	0.055	1	0.05222	86	80	120	0.9253	1.5	10	

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102707

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141208C: 51** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **12/08/14 16:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.470	0.050	0.5	0	94	90	110				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 65** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **12/08/14 16:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.475	0.050	0.5	0	95	90	110				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 68** SampType: **Sample Matrix Spike** Lab ID: **H14120109-016DMS** Method: **E350.1**
Analysis Date: **12/08/14 16:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.84	0.055	1	0.9561	89	80	120				

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Run ID :Run Order: **FIA203-HE_141208C: 69** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-016DMSD** Method: **E350.1**
Analysis Date: **12/08/14 16:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.82	0.055	1	0.9561	87	80	120	1.842	1.0	10	

Associated samples: **H14120109-001D, H14120109-004D, H14120109-005D, H14120109-016D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102712

Date: *06-Jan-15*

Run ID :Run Order: **PHSC_101-H_141209A: 66** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **12/09/14 17:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	3	2									

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **PHSC_101-H_141209A: 68** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **12/09/14 17:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	620	4.0	600	2.8	103	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **PHSC_101-H_141209A: 73** SampType: **Sample Duplicate** Lab ID: **H14120109-001ADUP** Method: **A2320 B**
Analysis Date: **12/09/14 18:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	100	4.0		0				101.5	0.8	10	
Bicarbonate as HCO3	120	4.0		0				123.2	0.8	10	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **PHSC_101-H_141209A: 109** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001AMS** Method: **A2320 B**
Analysis Date: **12/09/14 20:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	610	4.0	600	2.12	101	80	120				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **PHSC_101-H_141209A: 112** SampType: **Sample Duplicate** Lab ID: **H14120110-003ADUP** Method: **A2320 B**
Analysis Date: **12/09/14 20:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	95	4.0		0				94.3	0.5	10	
Bicarbonate as HCO3	120	4.0		0				114.4	0.5	10	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102737

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/09/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.14	0.10	4	0	104	95	105				
Boron	0.774	0.10	0.8	0	97	95	105				
Calcium	39.4	1.0	40	0	98	95	105				
Iron	3.92	0.020	4	0	98	95	105				
Magnesium	39.6	1.0	40	0	99	95	105				
Manganese	3.97	0.010	4	0	99	95	105				
Potassium	38.6	1.0	40	0	97	95	105				
Sodium	38.7	1.0	40	0	97	95	105				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **12/09/14 10:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.59	0.10	2.5	0	103	95	105				
Boron	2.46	0.10	2.5	0	98	95	105				
Calcium	24.9	1.0	25	0	100	95	105				
Iron	2.46	0.020	2.5	0	98	95	105				
Magnesium	24.8	1.0	25	0	99	95	105				
Manganese	2.47	0.010	2.5	0	99	95	105				
Potassium	24.3	1.0	25	0	97	95	105				
Sodium	24.4	1.0	25	0	97	95	105				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/09/14 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	536	0.10	500	0	107	80	120				
Boron	0.00363	0.10		0		0	0				
Calcium	469	1.0	500	0	94	80	120				
Iron	184	0.020	200	0	92	80	120				
Magnesium	512	1.0	500	0	102	80	120				
Manganese	-0.00814	0.010		0		0	0				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102737

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/09/14 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	-0.140	1.0		0		0	0				
Sodium	0.0106	1.0		0		0	0				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/09/14 10:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	538	0.10	500	0	108	80	120				
Boron	0.983	0.10	1	0	98	80	120				
Calcium	473	1.0	500	0	95	80	120				
Iron	184	0.020	200	0	92	80	120				
Magnesium	513	1.0	500	0	103	80	120				
Manganese	0.472	0.010	0.5	0	94	80	120				
Potassium	19.5	1.0	20	0	98	80	120				
Sodium	19.7	1.0	20	0	98	80	120				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 56** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **12/09/14 14:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.58	0.10	2.5	0	103	90	110				
Boron	2.53	0.10	2.5	0	101	90	110				
Calcium	24.4	1.0	25	0	98	90	110				
Iron	2.44	0.020	2.5	0	97	90	110				
Magnesium	24.3	1.0	25	0	97	90	110				
Manganese	2.42	0.010	2.5	0	97	90	110				
Potassium	24.4	1.0	25	0	98	90	110				
Sodium	24.6	1.0	25	0	98	90	110				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102737

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141209B: 68** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **12/09/14 15:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.57	0.10	2.5	0	103	90	110				
Boron	2.45	0.10	2.5	0	98	90	110				
Calcium	24.0	1.0	25	0	96	90	110				
Iron	2.41	0.020	2.5	0	96	90	110				
Magnesium	23.7	1.0	25	0	95	90	110				
Manganese	2.40	0.010	2.5	0	96	90	110				
Potassium	24.5	1.0	25	0	98	90	110				
Sodium	24.9	1.0	25	0	99	90	110				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Run ID :Run Order: **ICP2-HE_141209B: 80** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **12/09/14 16:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.60	0.10	2.5	0	104	90	110				
Boron	2.44	0.10	2.5	0	98	90	110				
Calcium	24.3	1.0	25	0	97	90	110				
Iron	2.43	0.020	2.5	0	97	90	110				
Magnesium	24.1	1.0	25	0	96	90	110				
Manganese	2.41	0.010	2.5	0	96	90	110				
Potassium	24.3	1.0	25	0	97	90	110				
Sodium	24.5	1.0	25	0	98	90	110				

Associated samples: **H14120109-001C, H14120109-002C, H14120109-003C, H14120109-004C, H14120109-005C, H14120109-006C, H14120109-007C, H14120109-008C, H14120109-009C, H14120109-010C, H14120109-011C, H14120109-012C, H14120109-013C, H14120109-014C, H14120109-015C, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **12/09/14 10:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.287	0.10	0.3	0	96	90	110				
Antimony	0.0592	0.050	0.06	0	99	90	110				
Arsenic	0.0584	0.0050	0.06	0	97	90	110				
Barium	0.0589	0.10	0.06	0	98	90	110				
Beryllium	0.0303	0.0010	0.03	0	101	90	110				
Cadmium	0.0308	0.0010	0.03	0	103	90	110				
Chromium	0.0596	0.010	0.06	0	99	90	110				
Cobalt	0.0584	0.010	0.06	0	97	90	110				
Copper	0.0605	0.010	0.06	0	101	90	110				
Iron	0.317	0.020	0.3	0	106	90	110				
Lead	0.0573	0.010	0.06	0	96	90	110				
Manganese	0.293	0.010	0.3	0	98	90	110				
Molybdenum	0.0590	0.0050	0.06	0	98	90	110				
Nickel	0.0599	0.010	0.06	0	100	90	110				
Selenium	0.0612	0.0050	0.06	0	102	90	110				
Silver	0.0284	0.0050	0.03	0	95	90	110				
Uranium	0.0581	0.0010	0.06	0	97	90	110				
Vanadium	0.0584	0.10	0.06	0	97	90	110				
Zinc	0.0611	0.010	0.06	0	102	90	110				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	36.8	0.10	40	0	92	70	130				
Antimony	6.40E-05	0.050		0							
Arsenic	0.000102	0.0050		0							
Barium	8.30E-05	0.10		0							
Beryllium	9.00E-06	0.0010		0							
Cadmium	0.000437	0.0010		0							
Chromium	0.00116	0.010		0							

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	0.000222	0.010		0							
Copper	0.000345	0.010		0							
Iron	96.6	0.020	100	0	97	70	130				
Lead	0.000203	0.010		0							
Manganese	ND	0.010		0							
Molybdenum	0.808	0.0050	0.8	0	101	70	130				
Nickel	0.000440	0.010		0							
Selenium	0.000172	0.0050		0							
Silver	0.000376	0.0050		0							
Uranium	7.00E-05	0.0010		0							
Vanadium	5.00E-05	0.10		0							
Zinc	0.000905	0.010		0							

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/09/14 10:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	36.8	0.10	40	0	92	70	130				
Antimony	0.000114	0.050		0		0	0				
Arsenic	0.0106	0.0050	0.01	0	106	70	130				
Barium	0.000373	0.10		0		0	0				
Beryllium	-1.00E-06	0.0010		0		0	0				
Cadmium	0.00968	0.0010	0.01	0	97	70	130				
Chromium	0.0215	0.010	0.02	0	108	70	130				
Cobalt	0.0200	0.010	0.02	0	100	70	130				
Copper	0.0210	0.010	0.02	0	105	70	130				
Iron	96.5	0.020	100	0	97	70	130				
Lead	0.000217	0.010		0		0	0				
Manganese	0.0197	0.010	0.02	0	99	70	130				
Molybdenum	0.813	0.0050	0.8	0	102	70	130				
Nickel	0.0207	0.010	0.02	0	103	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/09/14 10:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.0100	0.0050	0.01	0	100	70	130				
Silver	0.0170	0.0050	0.02	0	85	70	130				
Uranium	2.20E-05	0.0010		0		0	0				
Vanadium	0.0210	0.10	0.02	0	105	70	130				
Zinc	0.0112	0.010	0.01	0	112	70	130				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 23** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **12/09/14 16:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0003	0.0002									
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	0.0001	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	6E-05	3E-05									
Iron	0.0007	0.0002									
Lead	ND	8E-06									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	0.0003	0.0003									

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 24** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **12/09/14 16:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0475	0.10	0.05	0.0002959	94	85	115				
Antimony	0.0469	0.050	0.05	0	94	85	115				
Arsenic	0.0498	0.0050	0.05	0	100	85	115				
Barium	0.0488	0.10	0.05	0.0001164	97	85	115				
Beryllium	0.0497	0.0010	0.05	0	99	85	115				
Cadmium	0.0502	0.0010	0.05	0	100	85	115				
Chromium	0.0507	0.010	0.05	0	101	85	115				
Cobalt	0.0474	0.010	0.05	0	95	85	115				
Copper	0.0512	0.010	0.05	0.0000607	102	85	115				
Iron	0.152	0.020	0.15	0.0007333	101	85	115				
Lead	0.0474	0.010	0.05	0	95	85	115				
Manganese	0.0475	0.010	0.05	0	95	85	115				
Molybdenum	0.0479	0.0050	0.05	0	96	85	115				
Nickel	0.0505	0.010	0.05	0	101	85	115				
Selenium	0.0514	0.0050	0.05	0	103	85	115				
Silver	0.0191	0.0050	0.02	0	95	85	115				
Uranium	0.0473	0.0010	0.05	0	95	85	115				
Vanadium	0.0497	0.10	0.05	0	99	85	115				
Zinc	0.0532	0.010	0.05	0.0003189	106	85	115				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 117** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 23:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	38.0	0.10	40	0	95	70	130				
Antimony	8.40E-05	0.050		0							
Arsenic	0.000155	0.0050		0							
Barium	0.000143	0.10		0							
Beryllium	3.60E-05	0.0010		0							
Cadmium	0.000451	0.0010		0							
Chromium	0.00113	0.010		0							
Cobalt	0.000233	0.010		0							
Copper	0.000365	0.010		0							

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 117** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 23:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	102	0.020	100	0	102	70	130				
Lead	0.000239	0.010		0							
Manganese	-1.40E-05	0.010		0							
Molybdenum	0.841	0.0050	0.8	0	105	70	130				
Nickel	0.000445	0.010		0							
Selenium	0.000557	0.0050		0							
Silver	0.000282	0.0050		0							
Uranium	0.000298	0.0010		0							
Vanadium	0.000124	0.10		0							
Zinc	0.000999	0.010		0							

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 118** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/09/14 23:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.0	0.10	40	0	93	70	130				
Antimony	8.70E-05	0.050		0		0	0				
Arsenic	0.0102	0.0050	0.01	0	102	70	130				
Barium	0.000387	0.10		0		0	0				
Beryllium	1.80E-05	0.0010		0		0	0				
Cadmium	0.00928	0.0010	0.01	0	93	70	130				
Chromium	0.0217	0.010	0.02	0	108	70	130				
Cobalt	0.0192	0.010	0.02	0	96	70	130				
Copper	0.0206	0.010	0.02	0	103	70	130				
Iron	100	0.020	100	0	100	70	130				
Lead	0.000224	0.010		0		0	0				
Manganese	0.0189	0.010	0.02	0	95	70	130				
Molybdenum	0.817	0.0050	0.8	0	102	70	130				
Nickel	0.0204	0.010	0.02	0	102	70	130				
Selenium	0.0102	0.0050	0.01	0	102	70	130				
Silver	0.0166	0.0050	0.02	0	83	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 118** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/09/14 23:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	8.60E-05	0.0010		0		0	0				
Vanadium	0.0208	0.10	0.02	0	104	70	130				
Zinc	0.0107	0.010	0.01	0	107	70	130				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 165** SampType: **Sample Matrix Spike** Lab ID: **H14120106-015BMS** Method: **E200.8**

Analysis Date: **12/10/14 03:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0483	0.030	0.05	0.001804	93	70	130				
Antimony	0.0461	0.0010	0.05	0.0003163	92	70	130				
Arsenic	0.0614	0.0010	0.05	0.01168	99	70	130				
Barium	0.0857	0.050	0.05	0.03799	95	70	130				
Beryllium	0.0509	0.0010	0.05	0	102	70	130				
Cadmium	0.0483	0.0010	0.05	0	97	70	130				
Chromium	0.0497	0.0050	0.05	0	99	70	130				
Cobalt	0.0468	0.0050	0.05	0.0000316	94	70	130				
Copper	0.0515	0.0050	0.05	0.001369	100	70	130				
Iron	0.182	0.020	0.15	0.03605	98	70	130				
Lead	0.0476	0.0010	0.05	0.0002138	95	70	130				
Manganese	0.103	0.0010	0.05	0.0513	104	70	130				
Molybdenum	0.0503	0.0010	0.05	0.001955	97	70	130				
Nickel	0.0494	0.0050	0.05	0	99	70	130				
Selenium	0.0535	0.0010	0.05	0.0000824	107	70	130				
Silver	0.0179	0.0010	0.02	0	90	70	130				
Uranium	0.0527	0.00030	0.05	0.003981	97	70	130				
Vanadium	0.0507	0.010	0.05	0.001019	99	70	130				
Zinc	0.0602	0.010	0.05	0.007548	105	70	130				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 166** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120106-015BMSD** Method: **E200.8**

Analysis Date: **12/10/14 03:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0478	0.030	0.05	0.001804	92	70	130	0.04833	1.0	20	
Antimony	0.0463	0.0010	0.05	0.0003163	92	70	130	0.04609	0.5	20	
Arsenic	0.0620	0.0010	0.05	0.01168	101	70	130	0.06138	0.9	20	
Barium	0.0842	0.050	0.05	0.03799	92	70	130	0.08572	1.8	20	
Beryllium	0.0510	0.0010	0.05	0	102	70	130	0.05086	0.3	20	
Cadmium	0.0477	0.0010	0.05	0	95	70	130	0.0483	1.2	20	
Chromium	0.0502	0.0050	0.05	0	100	70	130	0.04968	1.1	20	
Cobalt	0.0464	0.0050	0.05	0.0000316	93	70	130	0.04681	0.9	20	
Copper	0.0516	0.0050	0.05	0.001369	101	70	130	0.05151	0.2	20	
Iron	0.187	0.020	0.15	0.03605	100	70	130	0.1825	2.3	20	
Lead	0.0468	0.0010	0.05	0.0002138	93	70	130	0.04763	1.7	20	
Manganese	0.104	0.0010	0.05	0.0513	105	70	130	0.1031	0.6	20	
Molybdenum	0.0496	0.0010	0.05	0.001955	95	70	130	0.05027	1.3	20	
Nickel	0.0499	0.0050	0.05	0	100	70	130	0.04936	1.1	20	
Selenium	0.0540	0.0010	0.05	0.0000824	108	70	130	0.05354	0.8	20	
Silver	0.0180	0.0010	0.02	0	90	70	130	0.01793	0.6	20	
Uranium	0.0522	0.00030	0.05	0.003981	96	70	130	0.05273	1.0	20	
Vanadium	0.0509	0.010	0.05	0.001019	100	70	130	0.05071	0.4	20	
Zinc	0.0586	0.010	0.05	0.007548	102	70	130	0.06024	2.7	20	

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 202** SampType: **Sample Matrix Spike** Lab ID: **H14120109-010BMS** Method: **E200.8**

Analysis Date: **12/10/14 05:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0506	0.030	0.05	0.004887	91	70	130				
Antimony	0.0462	0.0010	0.05	0.0001779	92	70	130				
Arsenic	0.0564	0.0010	0.05	0.004734	103	70	130				
Barium	0.0908	0.050	0.05	0.04226	97	70	130				
Beryllium	0.0496	0.0010	0.05	0	99	70	130				
Cadmium	0.0470	0.0010	0.05	0.0001016	94	70	130				
Chromium	0.0505	0.0050	0.05	0	101	70	130				
Cobalt	0.0466	0.0050	0.05	0.0003369	92	70	130				
Copper	0.0584	0.0050	0.05	0.007922	101	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 202** SampType: **Sample Matrix Spike** Lab ID: **H14120109-010BMS** Method: **E200.8**

Analysis Date: **12/10/14 05:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	0.198	0.020	0.15	0.05002	99	70	130				
Lead	0.0473	0.0010	0.05	0.0002495	94	70	130				
Manganese	0.383	0.0010	0.05	0.333		70	130				A
Molybdenum	0.0532	0.0010	0.05	0.005038	96	70	130				
Nickel	0.0506	0.0050	0.05	0.0005984	100	70	130				
Selenium	0.0548	0.0010	0.05	0.0003127	109	70	130				
Silver	0.0149	0.0010	0.02	0	74	70	130				
Uranium	0.0554	0.00030	0.05	0.005252	100	70	130				
Vanadium	0.0533	0.010	0.05	0.002134	102	70	130				
Zinc	0.161	0.010	0.05	0.1067	109	70	130				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 203** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-010BMSD** Method: **E200.8**

Analysis Date: **12/10/14 05:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0506	0.030	0.05	0.004887	91	70	130	0.05058	0.0	20	
Antimony	0.0467	0.0010	0.05	0.0001779	93	70	130	0.04616	1.2	20	
Arsenic	0.0555	0.0010	0.05	0.004734	102	70	130	0.05635	1.5	20	
Barium	0.0910	0.050	0.05	0.04226	97	70	130	0.09081	0.2	20	
Beryllium	0.0501	0.0010	0.05	0	100	70	130	0.04956	1.1	20	
Cadmium	0.0470	0.0010	0.05	0.0001016	94	70	130	0.04704	0.1	20	
Chromium	0.0497	0.0050	0.05	0	99	70	130	0.05051	1.6	20	
Cobalt	0.0460	0.0050	0.05	0.0003369	91	70	130	0.04657	1.1	20	
Copper	0.0561	0.0050	0.05	0.007922	96	70	130	0.05843	4.0	20	
Iron	0.200	0.020	0.15	0.05002	100	70	130	0.1983	0.9	20	
Lead	0.0476	0.0010	0.05	0.0002495	95	70	130	0.04727	0.6	20	
Manganese	0.382	0.0010	0.05	0.333		70	130	0.3829	0.4	20	A
Molybdenum	0.0537	0.0010	0.05	0.005038	97	70	130	0.05325	0.9	20	
Nickel	0.0483	0.0050	0.05	0.0005984	95	70	130	0.05058	4.6	20	
Selenium	0.0536	0.0010	0.05	0.0003127	107	70	130	0.05481	2.2	20	
Silver	0.0158	0.0010	0.02	0	79	70	130	0.0149	5.5	20	
Uranium	0.0550	0.00030	0.05	0.005252	99	70	130	0.05542	0.9	20	
Vanadium	0.0518	0.010	0.05	0.002134	99	70	130	0.05328	2.9	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 203** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-010BMSD** Method: **E200.8**

Analysis Date: **12/10/14 05:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.154	0.010	0.05	0.1067	96	70	130	0.1614	4.4	20	

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 245** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004BMS** Method: **E200.8**

Analysis Date: **12/10/14 09:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0453	0.030	0.05	0.0008038	89	70	130				
Antimony	0.0454	0.0010	0.05	0.0001712	90	70	130				
Arsenic	0.0521	0.0010	0.05	0.002569	99	70	130				
Barium	0.0969	0.050	0.05	0.0497	94	70	130				
Beryllium	0.0489	0.0010	0.05	0	98	70	130				
Cadmium	0.0465	0.0010	0.05	0.000023	93	70	130				
Chromium	0.0496	0.0050	0.05	0.0000369	99	70	130				
Cobalt	0.0454	0.0050	0.05	0.000106	91	70	130				
Copper	0.0504	0.0050	0.05	0.001597	98	70	130				
Iron	0.196	0.020	0.15	0.0482	98	70	130				
Lead	0.0458	0.0010	0.05	0.000054	92	70	130				
Manganese	0.172	0.0010	0.05	0.1276	89	70	130				
Molybdenum	0.0523	0.0010	0.05	0.005549	93	70	130				
Nickel	0.0486	0.0050	0.05	0	97	70	130				
Selenium	0.0536	0.0010	0.05	0.0001556	107	70	130				
Silver	0.0162	0.0010	0.02	0	81	70	130				
Uranium	0.0513	0.00030	0.05	0.003716	95	70	130				
Vanadium	0.0515	0.010	0.05	0.002249	98	70	130				
Zinc	0.0698	0.010	0.05	0.01857	102	70	130				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 246** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004BMSD** Method: **E200.8**

Analysis Date: **12/10/14 09:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.0452	0.030	0.05	0.0008038	89	70	130	0.04528	0.1	20	
Antimony	0.0454	0.0010	0.05	0.0001712	90	70	130	0.04535	0.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 246** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004BMSD** Method: **E200.8**

Analysis Date: **12/10/14 09:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0521	0.0010	0.05	0.002569	99	70	130	0.05211	0.1	20	
Barium	0.0957	0.050	0.05	0.0497	92	70	130	0.09692	1.2	20	
Beryllium	0.0488	0.0010	0.05	0	98	70	130	0.04889	0.2	20	
Cadmium	0.0469	0.0010	0.05	0.000023	94	70	130	0.04653	0.8	20	
Chromium	0.0493	0.0050	0.05	0.0000369	98	70	130	0.04962	0.7	20	
Cobalt	0.0459	0.0050	0.05	0.000106	92	70	130	0.0454	1.0	20	
Copper	0.0506	0.0050	0.05	0.001597	98	70	130	0.05042	0.4	20	
Iron	0.200	0.020	0.15	0.0482	101	70	130	0.1958	2.3	20	
Lead	0.0460	0.0010	0.05	0.000054	92	70	130	0.04583	0.5	20	
Manganese	0.175	0.0010	0.05	0.1276	94	70	130	0.1719	1.6	20	
Molybdenum	0.0522	0.0010	0.05	0.005549	93	70	130	0.05226	0.2	20	
Nickel	0.0486	0.0050	0.05	0	97	70	130	0.04857	0.1	20	
Selenium	0.0533	0.0010	0.05	0.0001556	106	70	130	0.05364	0.6	20	
Silver	0.0164	0.0010	0.02	0	82	70	130	0.01621	1.0	20	
Uranium	0.0523	0.00030	0.05	0.003716	97	70	130	0.05128	2.0	20	
Vanadium	0.0512	0.010	0.05	0.002249	98	70	130	0.05148	0.5	20	
Zinc	0.0685	0.010	0.05	0.01857	100	70	130	0.06979	1.9	20	

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 255** SampType: **Sample Matrix Spike** Lab ID: **H14120105-001BMS** Method: **E200.8**

Analysis Date: **12/10/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.297	0.030	0.25	0.06335	93	70	130				
Antimony	0.224	0.0010	0.25	0.0009095	89	70	130				
Arsenic	0.252	0.0010	0.25	0	101	70	130				
Barium	0.246	0.050	0.25	0.01618	92	70	130				
Beryllium	0.224	0.0010	0.25	0	90	70	130				
Cadmium	0.210	0.0010	0.25	0.000051	84	70	130				
Chromium	0.241	0.0050	0.25	0.0004265	96	70	130				
Cobalt	0.221	0.0050	0.25	0	88	70	130				
Copper	0.229	0.0050	0.25	0.001014	91	70	130				
Iron	0.761	0.020	0.75	0.05025	95	70	130				
Lead	0.236	0.0010	0.25	0.000153	94	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 255** SampType: **Sample Matrix Spike** Lab ID: **H14120105-001BMS** Method: **E200.8**

Analysis Date: **12/10/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	0.241	0.0010	0.25	0.01729	89	70	130				
Molybdenum	0.238	0.0010	0.25	0	95	70	130				
Nickel	0.231	0.0050	0.25	0	92	70	130				
Selenium	0.262	0.0010	0.25	0.01602	99	70	130				
Silver	0.0669	0.0010	0.1	0	67	70	130				S
Uranium	0.236	0.00030	0.25	0.0003315	94	70	130				
Vanadium	0.246	0.010	0.25	0.0008595	98	70	130				
Zinc	0.233	0.010	0.25	0.004408	91	70	130				

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 256** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120105-001BMSD** Method: **E200.8**

Analysis Date: **12/10/14 10:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.293	0.030	0.25	0.06335	92	70	130	0.2969	1.2	20	
Antimony	0.231	0.0010	0.25	0.0009095	92	70	130	0.2245	3.0	20	
Arsenic	0.256	0.0010	0.25	0	102	70	130	0.2516	1.7	20	
Barium	0.250	0.050	0.25	0.01618	93	70	130	0.2455	1.7	20	
Beryllium	0.227	0.0010	0.25	0	91	70	130	0.2243	1.1	20	
Cadmium	0.214	0.0010	0.25	0.000051	85	70	130	0.2095	2.0	20	
Chromium	0.243	0.0050	0.25	0.0004265	97	70	130	0.2414	0.7	20	
Cobalt	0.226	0.0050	0.25	0	91	70	130	0.2211	2.3	20	
Copper	0.232	0.0050	0.25	0.001014	92	70	130	0.229	1.1	20	
Iron	0.760	0.020	0.75	0.05025	95	70	130	0.761	0.2	20	
Lead	0.235	0.0010	0.25	0.000153	94	70	130	0.2363	0.4	20	
Manganese	0.242	0.0010	0.25	0.01729	90	70	130	0.241	0.4	20	
Molybdenum	0.241	0.0010	0.25	0	97	70	130	0.2376	1.6	20	
Nickel	0.234	0.0050	0.25	0	94	70	130	0.2311	1.4	20	
Selenium	0.265	0.0010	0.25	0.01602	100	70	130	0.2624	1.2	20	
Silver	0.0746	0.0010	0.1	0	75	70	130	0.0669	11	20	
Uranium	0.236	0.00030	0.25	0.0003315	94	70	130	0.2362	0.0	20	
Vanadium	0.253	0.010	0.25	0.0008595	101	70	130	0.2465	2.5	20	
Zinc	0.237	0.010	0.25	0.004408	93	70	130	0.2326	2.0	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 256** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120105-001BMSD** Method: **E200.8**

Analysis Date: **12/10/14 10:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120109-001B, H14120109-002B, H14120109-003B, H14120109-004B, H14120109-005B, H14120109-006B, H14120109-007B, H14120109-008B, H14120109-009B, H14120109-010B, H14120109-011B, H14120109-012B, H14120109-013B, H14120109-014B, H14120109-015B, H14120109-016B**

Run ID :Run Order: **ICPMS204-B_141209B: 277** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **12/10/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.302	0.10	0.3	0	101	90	110				
Antimony	0.0602	0.050	0.06	0	100	90	110				
Arsenic	0.0593	0.0050	0.06	0	99	90	110				
Barium	0.0594	0.10	0.06	0	99	90	110				
Beryllium	0.0305	0.0010	0.03	0	102	90	110				
Cadmium	0.0316	0.0010	0.03	0	105	90	110				
Chromium	0.0596	0.010	0.06	0	99	90	110				
Cobalt	0.0575	0.010	0.06	0	96	90	110				
Copper	0.0614	0.010	0.06	0	102	90	110				
Iron	0.313	0.020	0.3	0	104	90	110				
Lead	0.0597	0.010	0.06	0	100	90	110				
Manganese	0.298	0.010	0.3	0	99	90	110				
Molybdenum	0.0601	0.0050	0.06	0	100	90	110				
Nickel	0.0607	0.010	0.06	0	101	90	110				
Selenium	0.0596	0.0050	0.06	0	99	90	110				
Silver	0.0303	0.0050	0.03	0	101	90	110				
Uranium	0.0606	0.0010	0.06	0	101	90	110				
Vanadium	0.0590	0.10	0.06	0	98	90	110				
Zinc	0.0607	0.010	0.06	0	101	90	110				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 278** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/10/14 11:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.7	0.10	40	0	94	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 278** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/10/14 11:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	9.90E-05	0.050		0							
Arsenic	0.000117	0.0050		0							
Barium	0.000136	0.10		0							
Beryllium	3.10E-05	0.0010		0							
Cadmium	0.000495	0.0010		0							
Chromium	0.00111	0.010		0							
Cobalt	0.000274	0.010		0							
Copper	0.000342	0.010		0							
Iron	97.6	0.020	100	0	98	70	130				
Lead	0.000224	0.010		0							
Manganese	-0.000435	0.010		0							
Molybdenum	0.839	0.0050	0.8	0	105	70	130				
Nickel	0.000593	0.010		0							
Selenium	0.000146	0.0050		0							
Silver	0.000791	0.0050		0							
Uranium	8.10E-05	0.0010		0							
Vanadium	6.80E-05	0.10		0							
Zinc	0.000889	0.010		0							

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Run ID :Run Order: **ICPMS204-B_141209B: 279** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/10/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	37.5	0.10	40	0	94	70	130				
Antimony	0.000160	0.050		0		0	0				
Arsenic	0.0104	0.0050	0.01	0	104	70	130				
Barium	0.000385	0.10		0		0	0				
Beryllium	1.80E-05	0.0010		0		0	0				
Cadmium	0.00966	0.0010	0.01	0	97	70	130				
Chromium	0.0216	0.010	0.02	0	108	70	130				
Cobalt	0.0194	0.010	0.02	0	97	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141209B: 279** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/10/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 19	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.0208	0.010	0.02	0	104	70	130				
Iron	96.9	0.020	100	0	97	70	130				
Lead	0.000226	0.010		0		0	0				
Manganese	0.0189	0.010	0.02	0	95	70	130				
Molybdenum	0.835	0.0050	0.8	0	104	70	130				
Nickel	0.0209	0.010	0.02	0	104	70	130				
Selenium	0.00985	0.0050	0.01	0	99	70	130				
Silver	0.0176	0.0050	0.02	0	88	70	130				
Uranium	2.80E-05	0.0010		0		0	0				
Vanadium	0.0208	0.10	0.02	0	104	70	130				
Zinc	0.0112	0.010	0.01	0	112	70	130				

Associated samples: **H14120109-001B, H14120109-001C, H14120109-002B, H14120109-002C, H14120109-003B, H14120109-003C, H14120109-004B, H14120109-004C, H14120109-005B, H14120109-005C, H14120109-006B, H14120109-006C, H14120109-007B, H14120109-007C, H14120109-008B, H14120109-008C, H14120109-009B, H14120109-009C, H14120109-010B, H14120109-010C, H14120109-011B, H14120109-011C, H14120109-012B, H14120109-012C, H14120109-013B, H14120109-013C, H14120109-014B, H14120109-014C, H14120109-015B, H14120109-015C, H14120109-016B, H14120109-016C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102803

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141211B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **12/11/14 10:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0298	0.0050	0.03	0	99	90	110				

Associated samples: **H14120109-010C, H14120109-011C**

Run ID :Run Order: **ICPMS204-B_141211B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **12/11/14 10:31** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.000404	0.0050		0							

Associated samples: **H14120109-010C, H14120109-011C**

Run ID :Run Order: **ICPMS204-B_141211B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **12/11/14 10:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0177	0.0050	0.02	0	89	70	130				

Associated samples: **H14120109-010C, H14120109-011C**

Run ID :Run Order: **ICPMS204-B_141211B: 39** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **12/11/14 21:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0297	0.0050	0.03	0	99	90	110				

Associated samples: **H14120109-010C, H14120109-011C**

Run ID :Run Order: **ICPMS204-B_141211B: 40** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **12/11/14 21:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.000304	0.0050		0							

Associated samples: **H14120109-010C, H14120109-011C**

Run ID :Run Order: **ICPMS204-B_141211B: 41** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **12/11/14 21:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.0180	0.0050	0.02	0	90	70	130				

Associated samples: **H14120109-010C, H14120109-011C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102841

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141212B: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **12/12/14 12:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	16.2	0.50	15.2	0	107	90	110				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **12/12/14 12:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.03	0.055	1	0	103	90	110				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **12/12/14 12:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.540	0.050	0.5	0	108	90	110				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **12/12/14 12:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0472	0.050		0		0	0				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 18** SampType: **Sample Matrix Spike** Lab ID: **H14120109-008DMS** Method: **E350.1**
Analysis Date: **12/12/14 12:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.11	0.055	1	0	111	80	120				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102841

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141212B: 19** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-008DMSD** Method: **E350.1**
Analysis Date: **12/12/14 12:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.13	0.055	1	0	113	80	120	1.113	1.3	10	

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 24** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **12/12/14 12:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.539	0.050	0.5	0	108	90	110				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 39** SampType: **Sample Matrix Spike** Lab ID: **H14120109-013DMS** Method: **E350.1**
Analysis Date: **12/12/14 12:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	3.63	0.11	2	1.649	99	80	120				

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Run ID :Run Order: **FIA203-HE_141212B: 40** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-013DMSD** Method: **E350.1**
Analysis Date: **12/12/14 12:48** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	3.64	0.11	2	1.649	99	80	120	3.632	0.1	10	

Associated samples: **H14120109-002D, H14120109-003D, H14120109-006D, H14120109-007D, H14120109-008D, H14120109-009D, H14120109-010D, H14120109-011D, H14120109-012D, H14120109-013D, H14120109-014D, H14120109-015D**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102892

Date: *06-Jan-15*

Run ID :Run Order: **FIA202-HE_141216A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**

Analysis Date: **12/16/14 09:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.256	0.010	0.25	0	102	90	110				

Associated samples: **H14120109-006D, H14120109-007D, H14120109-011D**

Run ID :Run Order: **FIA202-HE_141216A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**

Analysis Date: **12/16/14 09:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0962	0.010	0.1	0	96	90	110				

Associated samples: **H14120109-006D, H14120109-007D, H14120109-011D**

Run ID :Run Order: **FIA202-HE_141216A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**

Analysis Date: **12/16/14 09:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-1.79E-05	0.010		0		0	0				

Associated samples: **H14120109-006D, H14120109-007D, H14120109-011D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102932

Date: *06-Jan-15*

Run ID :Run Order: **FIA203-HE_141217B: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.546	0.10	0.5	0	109	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.0847	0.10		0		0	0				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.501	0.10	0.5	0	100	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **FIA203-HE_141217B: 63** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.460	0.10	0.5	0	92	90	110				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103021

Date: *06-Jan-15*

Run ID :Run Order: **SOIL DRYING OVEN 2_141219A: 1** SampType: **Sample Duplicate** Lab ID: **H14120109-020BDUP** Method: **D2974**

Analysis Date: **12/22/14 10:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	78.6	0.20		0				80.41	2.3	20	

Associated samples: **H14120109-017B, H14120109-018B, H14120109-019B, H14120109-020B, H14120109-021B, H14120109-022B, H14120109-023B, H14120109-024B, H14120109-025B, H14120109-026B, H14120109-027B, H14120109-028B, H14120109-029B, H14120109-030B, H14120109-031B, H14120109-032B, H14120109-033B, H14120109-034B, H14120109-035B, H14120109-036B, H14120109-037B, H14120109-038B, H14120109-039B, H14120109-040B, H14120109-041B, H14120109-042B, H14120109-043B, H14120109-044B, H14120109-045B, H14120109-046B, H14120109-047B, H14120109-048B, H14120109-049B, H14120109-050B, H14120109-051B, H14120109-052B, H14120109-053B, H14120109-054B, H14120109-055B, H14120109-056B, H14120109-057B, H14120109-058B, H14120109-059B, H14120109-060B, H14120109-061B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141219A: 2** SampType: **Sample Duplicate** Lab ID: **H14120109-030BDUP** Method: **D2974**

Analysis Date: **12/22/14 10:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	67.6	0.20		0				67.59	0.0	20	

Associated samples: **H14120109-017B, H14120109-018B, H14120109-019B, H14120109-020B, H14120109-021B, H14120109-022B, H14120109-023B, H14120109-024B, H14120109-025B, H14120109-026B, H14120109-027B, H14120109-028B, H14120109-029B, H14120109-030B, H14120109-031B, H14120109-032B, H14120109-033B, H14120109-034B, H14120109-035B, H14120109-036B, H14120109-037B, H14120109-038B, H14120109-039B, H14120109-040B, H14120109-041B, H14120109-042B, H14120109-043B, H14120109-044B, H14120109-045B, H14120109-046B, H14120109-047B, H14120109-048B, H14120109-049B, H14120109-050B, H14120109-051B, H14120109-052B, H14120109-053B, H14120109-054B, H14120109-055B, H14120109-056B, H14120109-057B, H14120109-058B, H14120109-059B, H14120109-060B, H14120109-061B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141219A: 3** SampType: **Sample Duplicate** Lab ID: **H14120109-040BDUP** Method: **D2974**

Analysis Date: **12/22/14 10:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	21.6	0.20		0				20.18	6.6	20	

Associated samples: **H14120109-017B, H14120109-018B, H14120109-019B, H14120109-020B, H14120109-021B, H14120109-022B, H14120109-023B, H14120109-024B, H14120109-025B, H14120109-026B, H14120109-027B, H14120109-028B, H14120109-029B, H14120109-030B, H14120109-031B, H14120109-032B, H14120109-033B, H14120109-034B, H14120109-035B, H14120109-036B, H14120109-037B, H14120109-038B, H14120109-039B, H14120109-040B, H14120109-041B, H14120109-042B, H14120109-043B, H14120109-044B, H14120109-045B, H14120109-046B, H14120109-047B, H14120109-048B, H14120109-049B, H14120109-050B, H14120109-051B, H14120109-052B, H14120109-053B, H14120109-054B, H14120109-055B, H14120109-056B, H14120109-057B, H14120109-058B, H14120109-059B, H14120109-060B, H14120109-061B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141219A: 4** SampType: **Sample Duplicate** Lab ID: **H14120109-050BDUP** Method: **D2974**

Analysis Date: **12/22/14 10:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	66.1	0.20		0				67.37	1.9	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103021

Date: *06-Jan-15*

Run ID :Run Order: **SOIL DRYING OVEN 2_141219A: 4** SampType: **Sample Duplicate** Lab ID: **H14120109-050BDUP** Method: **D2974**

Analysis Date: **12/22/14 10:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120109-017B, H14120109-018B, H14120109-019B, H14120109-020B, H14120109-021B, H14120109-022B, H14120109-023B, H14120109-024B, H14120109-025B, H14120109-026B, H14120109-027B, H14120109-028B, H14120109-029B, H14120109-030B, H14120109-031B, H14120109-032B, H14120109-033B, H14120109-034B, H14120109-035B, H14120109-036B, H14120109-037B, H14120109-038B, H14120109-039B, H14120109-040B, H14120109-041B, H14120109-042B, H14120109-043B, H14120109-044B, H14120109-045B, H14120109-046B, H14120109-047B, H14120109-048B, H14120109-049B, H14120109-050B, H14120109-051B, H14120109-052B, H14120109-053B, H14120109-054B, H14120109-055B, H14120109-056B, H14120109-057B, H14120109-058B, H14120109-059B, H14120109-060B, H14120109-061B**

Run ID :Run Order: **SOIL DRYING OVEN 2_141219A: 5** SampType: **Sample Duplicate** Lab ID: **H14120109-060BDUP** Method: **D2974**

Analysis Date: **12/22/14 10:49** Units: **wt%** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Moisture	26.0	0.20		0				25.58	1.6	20	

Associated samples: **H14120109-017B, H14120109-018B, H14120109-019B, H14120109-020B, H14120109-021B, H14120109-022B, H14120109-023B, H14120109-024B, H14120109-025B, H14120109-026B, H14120109-027B, H14120109-028B, H14120109-029B, H14120109-030B, H14120109-031B, H14120109-032B, H14120109-033B, H14120109-034B, H14120109-035B, H14120109-036B, H14120109-037B, H14120109-038B, H14120109-039B, H14120109-040B, H14120109-041B, H14120109-042B, H14120109-043B, H14120109-044B, H14120109-045B, H14120109-046B, H14120109-047B, H14120109-048B, H14120109-049B, H14120109-050B, H14120109-051B, H14120109-052B, H14120109-053B, H14120109-054B, H14120109-055B, H14120109-056B, H14120109-057B, H14120109-058B, H14120109-059B, H14120109-060B, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103084

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/23/14 10:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.12	0.10	4	0	103	90	110				
Barium	0.806	0.10	0.8	0	101	90	110				
Beryllium	0.411	0.0010	0.4	0	103	90	110				
Boron	0.812	0.10	0.8	0	102	90	110				
Copper	0.814	0.010	0.8	0	102	90	110				
Iron	4.06	0.020	4	0	102	90	110				
Manganese	4.09	0.010	4	0	102	90	110				
Vanadium	0.830	0.10	0.8	0	104	90	110				
Zinc	0.824	0.010	0.8	0	103	90	110				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Run ID :Run Order: **ICP2-HE_141223B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/23/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	533	0.10	500	0	107	80	120				
Barium	0.000280	0.10		0		0	0				
Beryllium	6.00E-05	0.0010		0		0	0				
Boron	0.00721	0.10		0		0	0				
Copper	3.00E-05	0.010		0		0	0				
Iron	185	0.020	200	0	93	80	120				
Manganese	-0.00615	0.010		0		0	0				
Vanadium	0.00352	0.10		0		0	0				
Zinc	0.00333	0.010		0		0	0				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103084

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141223B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/23/14 10:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	535	0.10	500	0	107	80	120				
Barium	0.512	0.10	0.5	0	102	80	120				
Beryllium	0.493	0.0010	0.5	0	99	80	120				
Boron	1.01	0.10	1	0	101	80	120				
Copper	0.520	0.010	0.5	0	104	80	120				
Iron	185	0.020	200	0	92	80	120				
Manganese	0.479	0.010	0.5	0	96	80	120				
Vanadium	0.484	0.10	0.5	0	97	80	120				
Zinc	0.990	0.010	1	0	99	80	120				

Associated samples: **H14120109-018A, H14120109-018B, H14120109-021A, H14120109-021B, H14120109-024A, H14120109-024B, H14120109-027A, H14120109-027B, H14120109-030A, H14120109-030B, H14120109-033A, H14120109-033B, H14120109-036A, H14120109-036B, H14120109-039A, H14120109-039B, H14120109-042A, H14120109-042B, H14120109-045A, H14120109-045B, H14120109-048A, H14120109-048B, H14120109-051A, H14120109-051B, H14120109-054A, H14120109-054B, H14120109-057A, H14120109-057B, H14120109-060A, H14120109-060B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103113

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/24/14 09:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.99	0.10	4	0	100	90	110				
Barium	0.784	0.10	0.8	0	98	90	110				
Beryllium	0.402	0.0010	0.4	0	100	90	110				
Boron	0.791	0.10	0.8	0	99	90	110				
Copper	0.785	0.010	0.8	0	98	90	110				
Iron	3.84	0.020	4	0	96	90	110				
Manganese	3.91	0.010	4	0	98	90	110				
Nickel	0.788	0.010	0.8	0	98	90	110				
Vanadium	0.802	0.10	0.8	0	100	90	110				
Zinc	0.792	0.010	0.8	0	99	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-034A, H14120109-034B, H14120109-035A, H14120109-035B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-052A, H14120109-052B, H14120109-053A, H14120109-053B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICP2-HE_141224B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/24/14 10:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	521	0.10	500	0	104	80	120				
Barium	4.00E-05	0.10		0		0	0				
Beryllium	ND	0.0010		0		0	0				
Boron	0.00756	0.10		0		0	0				
Copper	0.00150	0.010		0		0	0				
Iron	177	0.020	200	0	89	80	120				
Manganese	-0.0165	0.010		0		0	0				
Nickel	0.00628	0.010		0		0	0				
Vanadium	0.000710	0.10		0		0	0				
Zinc	0.00117	0.010		0		0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103113

Date: *06-Jan-15*

Run ID :Run Order: **ICP2-HE_141224B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/24/14 10:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120109-017A, H14120109-017B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-034A, H14120109-034B, H14120109-035A, H14120109-035B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-052A, H14120109-052B, H14120109-053A, H14120109-053B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICP2-HE_141224B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/24/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	520	0.10	500	0	104	80	120				
Barium	0.492	0.10	0.5	0	98	80	120				
Beryllium	0.490	0.0010	0.5	0	98	80	120				
Boron	0.977	0.10	1	0	98	80	120				
Copper	0.498	0.010	0.5	0	100	80	120				
Iron	175	0.020	200	0	88	80	120				
Manganese	0.447	0.010	0.5	0	89	80	120				
Nickel	0.894	0.010	1	0	89	80	120				
Vanadium	0.478	0.10	0.5	0	96	80	120				
Zinc	0.958	0.010	1	0	96	80	120				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-034A, H14120109-034B, H14120109-035A, H14120109-035B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-052A, H14120109-052B, H14120109-053A, H14120109-053B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-061A, H14120109-061B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103125

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **12/24/14 17:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 12	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0574	0.0010	0.06	0	96	90	110				
Arsenic	0.0588	0.0010	0.06	0	98	90	110				
Boron	0.0582	0.0010	0.06	0	97	90	110				
Cadmium	0.0310	0.0010	0.03	0	103	90	110				
Chromium	0.0570	0.0010	0.06	0	95	90	110				
Cobalt	0.0588	0.0010	0.06	0	98	90	110				
Lead	0.0569	0.0010	0.06	0	95	90	110				
Molybdenum	0.0562	0.0010	0.06	0	94	90	110				
Nickel	0.0580	0.0010	0.06	0	97	90	110				
Selenium	0.0607	0.0010	0.06	0	101	90	110				
Silver	0.0288	0.0010	0.03	0	96	90	110				
Uranium	0.0588	0.00030	0.06	0	98	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B, H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B, H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Run ID :Run Order: **ICPMS204-B_141224B: 94** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **12/24/14 23:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 12	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0587	0.0010	0.06	0	98	90	110				
Arsenic	0.0593	0.0010	0.06	0	99	90	110				
Boron	0.0597	0.0010	0.06	0	100	90	110				
Cadmium	0.0314	0.0010	0.03	0	105	90	110				
Chromium	0.0586	0.0010	0.06	0	98	90	110				
Cobalt	0.0600	0.0010	0.06	0	100	90	110				
Lead	0.0574	0.0010	0.06	0	96	90	110				
Molybdenum	0.0572	0.0010	0.06	0	95	90	110				
Nickel	0.0595	0.0010	0.06	0	99	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103125

Date: *06-Jan-15*

Run ID :Run Order: **ICPMS204-B_141224B: 94** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **12/24/14 23:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 12	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.0594	0.0010	0.06	0	99	90	110				
Silver	0.0297	0.0010	0.03	0	99	90	110				
Uranium	0.0590	0.00030	0.06	0	98	90	110				

Associated samples: **H14120109-017A, H14120109-017B, H14120109-018A, H14120109-018B, H14120109-019A, H14120109-019B, H14120109-020A, H14120109-020B, H14120109-021A, H14120109-021B, H14120109-022A, H14120109-022B, H14120109-023A, H14120109-023B, H14120109-024A, H14120109-024B, H14120109-025A, H14120109-025B, H14120109-026A, H14120109-026B, H14120109-027A, H14120109-027B, H14120109-028A, H14120109-028B, H14120109-029A, H14120109-029B, H14120109-030A, H14120109-030B, H14120109-031A, H14120109-031B, H14120109-032A, H14120109-032B, H14120109-033A, H14120109-033B, H14120109-034A, H14120109-034B, H14120109-035A, H14120109-035B, H14120109-036A, H14120109-036B, H14120109-037A, H14120109-037B, H14120109-038A, H14120109-038B, H14120109-039A, H14120109-039B, H14120109-040A, H14120109-040B, H14120109-041A, H14120109-041B, H14120109-042A, H14120109-042B, H14120109-043A, H14120109-043B, H14120109-044A, H14120109-044B, H14120109-045A, H14120109-045B, H14120109-046A, H14120109-046B, H14120109-047A, H14120109-047B, H14120109-048A, H14120109-048B, H14120109-049A, H14120109-049B, H14120109-050A, H14120109-050B, H14120109-051A, H14120109-051B, H14120109-052A, H14120109-052B, H14120109-053A, H14120109-053B, H14120109-054A, H14120109-054B, H14120109-055A, H14120109-055B, H14120109-056A, H14120109-056B, H14120109-057A, H14120109-057B, H14120109-058A, H14120109-058B, H14120109-059A, H14120109-059B, H14120109-060A, H14120109-060B, H14120109-061A, H14120109-061B**

Qualifiers:
ND - Not Detected at the Reporting Limit
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S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: MT DEQ-Federal Superfund
Work Order: H14120109
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS141208A

Date: *06-Jan-15*

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 1** SampType: **Method Blank** Lab ID: **MB-1_141208A** Method: **A2540 D**

Analysis Date: **12/08/14 14:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_141208A** Method: **A2540 D**

Analysis Date: **12/08/14 14:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	96.0	10	100	0	96	80	120				

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 4** SampType: **Sample Duplicate** Lab ID: **H14120109-001A DUP** Method: **A2540 D**

Analysis Date: **12/08/14 14:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	11.6	2.1		0				11.33	2.5	5	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 1** SampType: **Sample Duplicate** Lab ID: **H14120109-011A DUP** Method: **A2540 D**

Analysis Date: **12/08/14 14:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	82.0	2.3		0				78.26	4.6	5	

Associated samples: **H14120109-001A, H14120109-002A, H14120109-003A, H14120109-004A, H14120109-005A, H14120109-006A, H14120109-007A, H14120109-008A, H14120109-009A, H14120109-010A, H14120109-011A, H14120109-012A, H14120109-013A, H14120109-014A, H14120109-015A, H14120109-016A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

MT DEQ-Federal Superfund H14120109

Login completed by: Tracy L. Lorash
Date Received: 12/5/2014
Reviewed by: BL2000\sdull
Received by: AHN
Reviewed Date: 12/10/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Collection time on COC for SS-14 is 1515 - sediment jar has time of 1645. Logged in with time from COC.
Sample ID on COC is SS-10A Duplicate 1 and Duplicate 2 -ID on sediment jars contains a # sign before 1 and 2. Logged in with ID from COC.
Cooler 1 was received at 3.6°C, Cooler 2 at 3.7°C, Cooler 3 at 0.4°C, Cooler 4 at 3.6°C. Samples were not received on ice. TI 12/5/14

ANALYTICAL SUMMARY REPORT

December 31, 2014

Natural Resource Damage Program
1301 E Lockey
Helena, MT 59620-1425

Work Order: H14120110 Quote ID: H956 - Silver Bow Monitoring

Project Name: Silver Bow Creek Monitoring

Energy Laboratories Inc Helena MT received the following 11 samples for Natural Resource Damage Program on 12/5/2014 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H14120110-001	Field Blank #2	12/04/14 15:45	12/05/14	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Tot. Rec. Alkalinity Conductivity Mercury, Dissolved Mercury, Total Recoverable Hardness as CaCO3 Anions by Ion Chromatography Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite Nitrogen, Total Persulfate Metals Digestion by EPA 200.2 Digestion, Mercury by CVAA Digestion, Total P Water Nitrogen, Total Persulfate Phosphorus, Total Solids, Total Suspended
H14120110-002	SS-01	12/04/14 16:15	12/05/14	Aqueous	Same As Above
H14120110-003	SS-01 Duplicate	12/04/14 16:15	12/05/14	Aqueous	Same As Above
H14120110-004	SS-05A	12/04/14 14:45	12/05/14	Aqueous	Same As Above
H14120110-005	SS-15G	12/03/14 13:00	12/05/14	Aqueous	Same As Above
H14120110-006	SS-01 Sediment Sieve <0.065mm	12/04/14 16:15	12/05/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves Soil Preparation
H14120110-007	SS-01 Sediment Sieve 0.065-1mm	12/04/14 16:15	12/05/14	Sediment	Metals by ICP/ICPMS, Total Mercury in Solid By CVAA Percent Moisture Digestion, Total Metals Digestion, Mercury by CVAA Sieves
H14120110-008	SS-01 Sediment Sieve 1-2mm	12/04/14 16:15	12/05/14	Sediment	Same As Above
H14120110-009	SS-05A Sediment Sieve <0.065mm	12/04/14 14:45	12/05/14	Sediment	Same As Above
H14120110-010	SS-05A Sediment Sieve 0.065-1mm	12/04/14 14:45	12/05/14	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

H14120110-011	SS-05A Sediment Sieve 1-2mm	12/04/14 14:45	12/05/14	Sediment	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Blank #2
Lab ID: H14120110-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 15:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	12/08/14 14:31 / SR		I24 (14410200)_141208A	21	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	ND	mg/L		4		A2320 B	12/09/14 20:04 / SR		PHSC_101-H_141209A	107	R102712
Bicarbonate as HCO3	ND	mg/L		4		A2320 B	12/09/14 20:04 / SR		PHSC_101-H_141209A	107	R102712
Chloride	ND	mg/L		1		E300.0	12/09/14 00:04 / SR		IC102-H_141208A	84	R102706
Sulfate	ND	mg/L		1		E300.0	12/09/14 00:04 / SR		IC102-H_141208A	84	R102706
Hardness as CaCO3	ND	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	5	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/08/14 16:23 / cm		FIA203-HE_141208C	70	R102707
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.05		E353.2	12/08/14 12:27 / cm		FIA203-HE_141208A	87	R102687
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	12/17/14 15:06 / cm	12/16/14 10:35	FIA203-HE_141217B	33	27400
Phosphorus, Total as P	ND	mg/L		0.005		E365.1	12/08/14 15:16 / cm	12/08/14 13:31	FIA202-HE_141208A	82	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Arsenic	ND	mg/L		0.001		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Barium	ND	mg/L		0.003		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Boron	ND	mg/L		0.1		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Calcium	ND	mg/L		1		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Chromium	ND	mg/L		0.01		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Copper	ND	mg/L		0.001		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Iron	ND	mg/L		0.02		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Lead	ND	mg/L		0.0003		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Magnesium	ND	mg/L		1		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Manganese	ND	mg/L		0.001		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:26 / rgk	12/11/14 11:37	HGCV202-H_141215A	31	27357

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Blank #2
Lab ID: H14120110-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 15:45 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Potassium	ND	mg/L		1		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Selenium	ND	mg/L		0.001		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Sodium	ND	mg/L		1		E200.7	12/10/14 09:30 / sld		ICP2-HE_141210A	15	R102752
Uranium	ND	mg/L		0.0002		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 07:50 / dck		ICPMS204-B_141209B	227	R102739
Zinc	0.009	mg/L		0.008		E200.8	12/13/14 02:38 / dck		ICPMS204-B_141212B	79	R102843
METALS, TOTAL RECOVERABLE											
Aluminum	ND	mg/L		0.009		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Arsenic	ND	mg/L		0.001		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Barium	ND	mg/L		0.003		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Boron	ND	mg/L		0.1		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Calcium	ND	mg/L		1		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Chromium	ND	mg/L		0.01		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Copper	ND	mg/L		0.001		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Iron	0.04	mg/L		0.02		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Lead	ND	mg/L		0.0003		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Magnesium	ND	mg/L		1		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Manganese	ND	mg/L		0.001		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:39 / rgk	12/11/14 11:37	HGCV202-H_141215A	34	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Nickel	ND	mg/L		0.002		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Potassium	ND	mg/L		1		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Selenium	ND	mg/L		0.001		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Silver	ND	mg/L		0.0002		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: Field Blank #2
Lab ID: H14120110-001
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 15:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	ND	mg/L		1		E200.7	12/09/14 16:47 / sld	12/08/14 09:37	ICP2-HE_141209B	91	27300
Uranium	ND	mg/L		0.0002		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300
Zinc	ND	mg/L		0.008		E200.8	12/10/14 08:17 / dck	12/08/14 09:37	ICPMS204-B_141209B	233	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14120110-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	5	mg/L		1		A2540 D	12/08/14 14:32 / SR		I24 (14410200)_141208A	22	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	94	mg/L		4		A2320 B	12/09/14 19:59 / SR		PHSC_101-H_141209A	105	R102712
Bicarbonate as HCO3	110	mg/L		4		A2320 B	12/09/14 19:59 / SR		PHSC_101-H_141209A	105	R102712
Chloride	16	mg/L		1		E300.0	12/09/14 00:15 / SR		IC102-H_141208A	85	R102706
Sulfate	24	mg/L		1		E300.0	12/09/14 00:15 / SR		IC102-H_141208A	85	R102706
Hardness as CaCO3	118	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	6	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/08/14 16:24 / cm		FIA203-HE_141208C	71	R102707
Nitrogen, Nitrate+Nitrite as N	1.20	mg/L		0.05		E353.2	12/08/14 12:31 / cm		FIA203-HE_141208A	90	R102687
Nitrogen, Total	1.29	mg/L	D	0.06		A4500 N-C	12/17/14 15:10 / cm	12/16/14 10:35	FIA203-HE_141217B	36	27400
Phosphorus, Total as P	0.083	mg/L		0.005		E365.1	12/08/14 15:17 / cm	12/08/14 13:31	FIA202-HE_141208A	83	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Arsenic	0.002	mg/L		0.001		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Barium	0.049	mg/L		0.003		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Boron	ND	mg/L		0.1		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Calcium	33	mg/L		1		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Chromium	ND	mg/L		0.01		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Copper	0.001	mg/L		0.001		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Iron	0.08	mg/L		0.02		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Lead	ND	mg/L		0.0003		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Magnesium	9	mg/L		1		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Manganese	0.064	mg/L		0.001		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:43 / rgk	12/11/14 11:37	HGCV202-H_141215A	35	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14120110-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Potassium	3	mg/L		1		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Selenium	ND	mg/L		0.001		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Sodium	13	mg/L		1		E200.7	12/10/14 09:52 / sld		ICP2-HE_141210A	21	R102752
Uranium	0.0030	mg/L		0.0002		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
Zinc	ND	mg/L		0.008		E200.8	12/10/14 08:49 / dck		ICPMS204-B_141209B	240	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.125	mg/L		0.009		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Arsenic	0.002	mg/L		0.001		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Barium	0.050	mg/L		0.003		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Boron	ND	mg/L		0.1		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Cadmium	ND	mg/L	D	0.00004		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Calcium	33	mg/L		1		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Chromium	ND	mg/L		0.01		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Copper	0.003	mg/L		0.001		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Iron	0.43	mg/L		0.02		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Lead	0.0005	mg/L		0.0003		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Magnesium	9	mg/L		1		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Manganese	0.069	mg/L		0.001		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:47 / rgk	12/11/14 11:37	HGCV202-H_141215A	36	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Nickel	ND	mg/L		0.002		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Potassium	3	mg/L		1		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Selenium	ND	mg/L		0.001		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Silver	ND	mg/L		0.0002		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01
Lab ID: H14120110-002
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	13	mg/L		1		E200.7	12/09/14 17:36 / sld	12/08/14 09:37	ICP2-HE_141209B	104	27300
Uranium	0.0032	mg/L		0.0002		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300
Zinc	0.010	mg/L		0.008		E200.8	12/10/14 08:54 / dck	12/08/14 09:37	ICPMS204-B_141209B	241	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Duplicate
Lab ID: H14120110-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	6	mg/L		1		A2540 D	12/08/14 14:32 / SR		I24 (14410200)_141208A	23	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	94	mg/L		4		A2320 B	12/09/14 20:21 / SR		PHSC_101-H_141209A	110	R102712
Bicarbonate as HCO3	110	mg/L		4		A2320 B	12/09/14 20:21 / SR		PHSC_101-H_141209A	110	R102712
Chloride	16	mg/L		1		E300.0	12/09/14 00:26 / SR		IC102-H_141208A	86	R102706
Sulfate	25	mg/L		1		E300.0	12/09/14 00:26 / SR		IC102-H_141208A	86	R102706
Hardness as CaCO3	119	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	7	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/08/14 16:25 / cm		FIA203-HE_141208C	72	R102707
Nitrogen, Nitrate+Nitrite as N	1.19	mg/L		0.05		E353.2	12/08/14 12:32 / cm		FIA203-HE_141208A	91	R102687
Nitrogen, Total	1.26	mg/L	D	0.06		A4500 N-C	12/17/14 15:11 / cm	12/16/14 10:35	FIA203-HE_141217B	37	27400
Phosphorus, Total as P	0.084	mg/L		0.005		E365.1	12/08/14 15:18 / cm	12/08/14 13:31	FIA202-HE_141208A	84	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Arsenic	0.002	mg/L		0.001		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Barium	0.048	mg/L		0.003		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Boron	ND	mg/L		0.1		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Calcium	33	mg/L		1		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Chromium	ND	mg/L		0.01		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Copper	0.001	mg/L		0.001		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Iron	0.07	mg/L		0.02		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Lead	ND	mg/L		0.0003		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Magnesium	9	mg/L		1		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Manganese	0.063	mg/L		0.001		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:51 / rgk	12/11/14 11:37	HGCV202-H_141215A	37	27357

Report Definitions:
RL - Analyte reporting limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Duplicate
Lab ID: H14120110-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Potassium	3	mg/L		1		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Selenium	ND	mg/L		0.001		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Sodium	13	mg/L		1		E200.7	12/10/14 09:56 / sld		ICP2-HE_141210A	22	R102752
Uranium	0.0030	mg/L		0.0002		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
Zinc	ND	mg/L		0.008		E200.8	12/10/14 08:59 / dck		ICPMS204-B_141209B	242	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.121	mg/L		0.009		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Arsenic	0.002	mg/L		0.001		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Barium	0.050	mg/L		0.003		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Boron	ND	mg/L		0.1		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Cadmium	0.00004	mg/L		0.00003		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Calcium	33	mg/L		1		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Chromium	ND	mg/L		0.01		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Copper	0.003	mg/L		0.001		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Iron	0.43	mg/L		0.02		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Lead	0.0005	mg/L		0.0003		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Magnesium	9	mg/L		1		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Manganese	0.071	mg/L		0.001		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Mercury	ND	mg/L		5E-06		E245.1	12/15/14 16:56 / rgk	12/11/14 11:37	HGCV202-H_141215A	38	27357
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Nickel	ND	mg/L		0.002		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Potassium	3	mg/L		1		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Selenium	ND	mg/L		0.001		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Silver	ND	mg/L		0.0002		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Duplicate
Lab ID: H14120110-003
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	13	mg/L		1		E200.7	12/09/14 17:40 / sld	12/08/14 09:37	ICP2-HE_141209B	105	27300
Uranium	0.0032	mg/L		0.0002		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300
Zinc	ND	mg/L		0.008		E200.8	12/10/14 09:03 / dck	12/08/14 09:37	ICPMS204-B_141209B	243	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14120110-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	15	mg/L		1		A2540 D	12/08/14 14:32 / SR		I24 (14410200)_141208A	24	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	110	mg/L		4		A2320 B	12/10/14 11:46 / SR		PHSC_101-H_141210A	28	R102740
Bicarbonate as HCO3	130	mg/L		4		A2320 B	12/10/14 11:46 / SR		PHSC_101-H_141210A	28	R102740
Chloride	24	mg/L		1		E300.0	12/09/14 00:59 / SR		IC102-H_141208A	89	R102706
Sulfate	29	mg/L		1		E300.0	12/09/14 00:59 / SR		IC102-H_141208A	89	R102706
Hardness as CaCO3	142	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	8	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/08/14 16:26 / cm		FIA203-HE_141208C	73	R102707
Nitrogen, Nitrate+Nitrite as N	1.26	mg/L		0.05		E353.2	12/08/14 12:33 / cm		FIA203-HE_141208A	92	R102687
Nitrogen, Total	1.57	mg/L		0.05		A4500 N-C	12/17/14 15:12 / cm	12/16/14 10:35	FIA203-HE_141217B	38	27400
Phosphorus, Total as P	0.121	mg/L		0.005		E365.1	12/16/14 09:19 / cm	12/08/14 13:31	FIA202-HE_141216A	16	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Arsenic	0.003	mg/L		0.001		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Barium	0.050	mg/L		0.003		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Boron	ND	mg/L		0.1		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Calcium	38	mg/L		1		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Chromium	ND	mg/L		0.01		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Copper	0.002	mg/L		0.001		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Iron	0.04	mg/L		0.02		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Lead	ND	mg/L		0.0003		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Magnesium	11	mg/L		1		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Manganese	0.135	mg/L		0.001		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 15:05 / rgk	12/15/14 11:30	HGCV202-H_141216A	50	27386

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14120110-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	0.006	mg/L		0.005		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Potassium	3	mg/L		1		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Selenium	ND	mg/L		0.001		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Sodium	16	mg/L		1		E200.7	12/10/14 10:00 / sld		ICP2-HE_141210A	23	R102752
Uranium	0.0037	mg/L		0.0002		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
Zinc	0.019	mg/L		0.008		E200.8	12/10/14 09:08 / dck		ICPMS204-B_141209B	244	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.328	mg/L		0.009		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Antimony	0.0005	mg/L		0.0005		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Arsenic	0.004	mg/L		0.001		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Barium	0.055	mg/L		0.003		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Boron	ND	mg/L		0.1		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Cadmium	0.00017	mg/L		0.00003		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Calcium	39	mg/L		1		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Chromium	ND	mg/L		0.01		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Copper	0.012	mg/L		0.001		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Iron	0.81	mg/L		0.02		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Lead	0.0039	mg/L		0.0003		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Magnesium	11	mg/L		1		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Manganese	0.161	mg/L		0.001		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Mercury	9.4E-06	mg/L		5E-06		E245.1	12/16/14 15:18 / rgk	12/15/14 11:30	HGCV202-H_141216A	53	27386
Molybdenum	0.006	mg/L		0.005		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Nickel	ND	mg/L		0.002		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Potassium	3	mg/L		1		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Selenium	ND	mg/L		0.001		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Silver	0.0003	mg/L		0.0002		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A
Lab ID: H14120110-004
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	17	mg/L		1		E200.7	12/09/14 17:43 / sld	12/08/14 09:37	ICP2-HE_141209B	106	27300
Uranium	0.0040	mg/L		0.0002		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300
Zinc	0.046	mg/L		0.008		E200.8	12/10/14 09:27 / dck	12/08/14 09:37	ICPMS204-B_141209B	248	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14120110-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:00
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL PROPERTIES											
Solids, Total Suspended TSS @ 105 C	3	mg/L		2		A2540 D	12/08/14 14:33 / SR		I24 (14410200)_141208A	27	TSS141208A
INORGANICS											
Alkalinity, Total as CaCO3	100	mg/L		4		A2320 B	12/10/14 11:58 / SR		PHSC_101-H_141210A	32	R102740
Bicarbonate as HCO3	120	mg/L		4		A2320 B	12/10/14 11:58 / SR		PHSC_101-H_141210A	32	R102740
Chloride	ND	mg/L		1		E300.0	12/09/14 01:33 / SR		IC102-H_141208A	92	R102706
Sulfate	21	mg/L		1		E300.0	12/09/14 01:33 / SR		IC102-H_141208A	92	R102706
Hardness as CaCO3	115	mg/L		1		A2340 B	12/11/14 13:18 / sld		WATERCALC_141211B	9	R102796
NUTRIENTS											
Nitrogen, Ammonia as N	ND	mg/L		0.05		E350.1	12/08/14 16:27 / cm		FIA203-HE_141208C	74	R102707
Nitrogen, Nitrate+Nitrite as N	0.11	mg/L		0.05		E353.2	12/08/14 12:34 / cm		FIA203-HE_141208A	93	R102687
Nitrogen, Total	ND	mg/L		0.05		A4500 N-C	12/17/14 15:26 / cm	12/16/14 10:39	FIA203-HE_141217B	50	27401
Phosphorus, Total as P	0.037	mg/L		0.005		E365.1	12/08/14 15:36 / cm	12/08/14 13:31	FIA202-HE_141208A	102	27312
METALS, DISSOLVED											
Aluminum	ND	mg/L		0.009		E200.7	12/10/14 10:04 / sld		ICP2-HE_141210A	24	R102752
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Arsenic	0.003	mg/L		0.001		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Barium	0.021	mg/L		0.003		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Boron	ND	mg/L		0.1		E200.7	12/10/14 10:04 / sld		ICP2-HE_141210A	24	R102752
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Calcium	36	mg/L		1		E200.7	12/10/14 10:04 / sld		ICP2-HE_141210A	24	R102752
Chromium	ND	mg/L		0.01		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Copper	ND	mg/L		0.001		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Iron	ND	mg/L		0.02		E200.7	12/10/14 10:04 / sld		ICP2-HE_141210A	24	R102752
Lead	ND	mg/L		0.0003		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Magnesium	7	mg/L		1		E200.7	12/10/14 10:04 / sld		ICP2-HE_141210A	24	R102752
Manganese	0.001	mg/L		0.001		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 15:22 / rgk	12/15/14 11:30	HGCV202-H_141216A	54	27386

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14120110-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:00
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, DISSOLVED											
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Nickel	ND	mg/L		0.002		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Potassium	1	mg/L		1		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Selenium	ND	mg/L		0.001		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Silver	ND	mg/L		0.0002		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Sodium	4	mg/L		1		E200.7	12/10/14 10:04 / sld		ICP2-HE_141210A	24	R102752
Uranium	0.0007	mg/L		0.0002		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
Zinc	ND	mg/L		0.008		E200.8	12/10/14 09:31 / dck		ICPMS204-B_141209B	249	R102739
METALS, TOTAL RECOVERABLE											
Aluminum	0.087	mg/L		0.009		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Antimony	ND	mg/L		0.0005		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Arsenic	0.003	mg/L		0.001		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Barium	0.020	mg/L		0.003		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Beryllium	ND	mg/L		0.0008		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Boron	ND	mg/L		0.1		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Cadmium	ND	mg/L		0.00003		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Calcium	35	mg/L		1		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Chromium	ND	mg/L		0.01		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Cobalt	ND	mg/L		0.01		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Copper	ND	mg/L		0.001		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Iron	0.08	mg/L		0.02		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Lead	ND	mg/L		0.0003		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Magnesium	6	mg/L		1		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Manganese	0.004	mg/L		0.001		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Mercury	ND	mg/L		5E-06		E245.1	12/16/14 15:27 / rgk	12/15/14 11:30	HGCV202-H_141216A	55	27386
Molybdenum	ND	mg/L		0.005		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Nickel	ND	mg/L		0.002		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Potassium	1	mg/L		1		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Selenium	ND	mg/L		0.001		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Silver	ND	mg/L		0.0002		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-15G
Lab ID: H14120110-005
Matrix: Aqueous

Project: Silver Bow Creek Monitoring
Collection Date: 12/03/14 13:00
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METALS, TOTAL RECOVERABLE											
Sodium	4	mg/L		1		E200.7	12/09/14 17:47 / sld	12/08/14 09:37	ICP2-HE_141209B	107	27300
Uranium	0.0008	mg/L		0.0002		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Vanadium	ND	mg/L		0.1		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300
Zinc	ND	mg/L		0.008		E200.8	12/10/14 09:40 / dck	12/08/14 09:37	ICPMS204-B_141209B	250	27300

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14120110-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	1.8	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	46	R103020
PHYSICAL CHARACTERISTICS											
Moisture	55.7	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	58	R103021
3050 EXTRACTABLE METALS											
Aluminum	11100	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Arsenic	19	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Barium	146	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Cadmium	1.0	mg/kg		0.2		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Chromium	29	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Cobalt	6	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Copper	164	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Iron	16600	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Lead	66	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Manganese	760	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Molybdenum	12	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Nickel	13	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	120	27432
Vanadium	50	mg/kg		1		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
Zinc	228	mg/kg		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	95	27432
METALS, TOTAL											
Mercury	0.10	mg/kg		0.10		SW7471B	12/26/14 13:09 / rgk	12/22/14 12:34	HGCV201-H_141226B	25	27465
METAL, DRY WEIGHT											
Aluminum	24900	mg/kg-dry		8		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve <0.065mm
Lab ID: H14120110-006
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Arsenic	42	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Barium	330	mg/kg-dry		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Cadmium	2.2	mg/kg-dry		0.3		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Chromium	66	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Cobalt	13	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Copper	369	mg/kg-dry		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Iron	37500	mg/kg-dry		7		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Lead	150	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Manganese	1720	mg/kg-dry		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Molybdenum	26	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Nickel	29	mg/kg-dry		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Uranium	7	mg/kg-dry		5		SW6020	12/25/14 01:59 / sld	12/18/14 09:55	ICPMS204-B_141224B	289	27432
Vanadium	114	mg/kg-dry		2		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Zinc	514	mg/kg-dry		5		SW6010B	12/24/14 20:19 / sld	12/18/14 09:55	ICP2-HE_141224B	159	27432
Mercury	0.23	mg/kg-dry		0.10		SW7471B	12/26/14 13:09 / rgk	12/22/14 12:34	HGCV201-H_141226B	70	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14120110-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	66.4	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	47	R103020
PHYSICAL CHARACTERISTICS											
Moisture	24.3	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	59	R103021
3050 EXTRACTABLE METALS											
Aluminum	2640	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Antimony	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Arsenic	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Barium	35	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Beryllium	ND	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Boron	ND	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Cadmium	ND	mg/kg		0.2		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Chromium	9	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Cobalt	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Copper	24	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Iron	4720	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Lead	10	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Manganese	126	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Molybdenum	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Nickel	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Selenium	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Silver	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Uranium	ND	mg/kg		5		SW6020	12/29/14 12:56 / dck	12/24/14 09:22	ICPMS204-B_141229A	27	27491
Vanadium	12	mg/kg		1		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
Zinc	60	mg/kg		5		SW6010B	12/29/14 12:04 / sld	12/24/14 09:22	ICP2-HE_141229B	25	27491
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 13:29 / rgk	12/22/14 12:34	HGCV201-H_141226B	32	27465
METAL, DRY WEIGHT											
Aluminum	3390	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 0.065-1mm
Lab ID: H14120110-007
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Arsenic	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Barium	45	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Boron	ND	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Cadmium	ND	mg/kg-dry		0.2		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Chromium	11	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Cobalt	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Copper	31	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Iron	6060	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Lead	13	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Manganese	161	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Nickel	6	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Silver	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/29/14 12:56 / dck	12/18/14 09:57	ICPMS204-B_141229A	59	27433
Vanadium	15	mg/kg-dry		1		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Zinc	77	mg/kg-dry		5		SW6010B	12/29/14 12:04 / sld	12/18/14 09:57	ICP2-HE_141229B	43	27433
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 13:29 / rgk	12/22/14 12:34	HGCV201-H_141226B	77	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14120110-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	26.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	48	R103020
PHYSICAL CHARACTERISTICS											
Moisture	13.4	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	60	R103021
3050 EXTRACTABLE METALS											
Aluminum	3230	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Arsenic	7	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Barium	53	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Cadmium	ND	mg/kg		0.2		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Chromium	ND	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Copper	27	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Iron	5480	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Lead	6	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Manganese	168	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Molybdenum	16	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	155	27434
Vanadium	14	mg/kg		1		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
Zinc	46	mg/kg		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	132	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 13:31 / rgk	12/22/14 12:34	HGCV201-H_141226B	33	27465
METAL, DRY WEIGHT											
Aluminum	3730	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-01 Sediment Sieve 1-2mm
Lab ID: H14120110-008
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 16:15
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Arsenic	8	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Barium	61	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Cadmium	ND	mg/kg-dry		0.2		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Chromium	ND	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Copper	32	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Iron	6330	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Lead	7	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Manganese	194	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Molybdenum	18	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:46 / sld	12/18/14 09:58	ICPMS204-B_141224B	324	27434
Vanadium	16	mg/kg-dry		1		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Zinc	53	mg/kg-dry		5		SW6010B	12/24/14 22:37 / sld	12/18/14 09:58	ICP2-HE_141224B	193	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 13:31 / rgk	12/22/14 12:34	HGCV201-H_141226B	78	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14120110-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	3.7	wt% Passed		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	49	R103020
PHYSICAL CHARACTERISTICS											
Moisture	61.5	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	61	R103021
3050 EXTRACTABLE METALS											
Aluminum	9550	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Antimony	ND	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Arsenic	85	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Barium	159	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Boron	ND	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Cadmium	3.8	mg/kg		0.2		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Chromium	24	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Cobalt	ND	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Copper	933	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Iron	17100	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Lead	220	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Manganese	835	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Molybdenum	10	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Nickel	9	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Selenium	ND	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Silver	ND	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Uranium	ND	mg/kg		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	121	27432
Vanadium	43	mg/kg		1		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
Zinc	985	mg/kg		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	96	27432
METALS, TOTAL											
Mercury	0.48	mg/kg		0.10		SW7471B	12/26/14 13:51 / rgk	12/22/14 12:34	HGCV201-H_141226B	40	27465
METAL, DRY WEIGHT											
Aluminum	24800	mg/kg-dry		9		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve <0.065mm
Lab ID: H14120110-009
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Arsenic	221	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Barium	414	mg/kg-dry		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Boron	ND	mg/kg-dry		10		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Cadmium	9.9	mg/kg-dry		0.4		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Chromium	63	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Cobalt	11	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Copper	2420	mg/kg-dry		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Iron	44500	mg/kg-dry		8		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Lead	572	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Manganese	2170	mg/kg-dry		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Molybdenum	26	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Nickel	25	mg/kg-dry		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Silver	10	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Uranium	8	mg/kg-dry		5		SW6020	12/25/14 02:03 / sld	12/18/14 09:55	ICPMS204-B_141224B	290	27432
Vanadium	113	mg/kg-dry		2		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Zinc	2560	mg/kg-dry		5		SW6010B	12/24/14 20:23 / sld	12/18/14 09:55	ICP2-HE_141224B	160	27432
Mercury	1.2	mg/kg-dry		0.13		SW7471B	12/26/14 13:51 / rgk	12/22/14 12:34	HGCV201-H_141226B	85	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14120110-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 230 Sieve	53.2	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	50	R103020
PHYSICAL CHARACTERISTICS											
Moisture	20.0	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	62	R103021
3050 EXTRACTABLE METALS											
Aluminum	4520	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Antimony	ND	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Arsenic	89	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Barium	77	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Beryllium	ND	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Boron	6	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Cadmium	2.5	mg/kg		0.2		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Chromium	23	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Cobalt	10	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Copper	719	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Iron	47500	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Lead	136	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Manganese	1640	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Molybdenum	ND	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Nickel	9	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Selenium	ND	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Silver	ND	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Uranium	ND	mg/kg		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	43	27433
Vanadium	77	mg/kg		1		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
Zinc	951	mg/kg		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	55	27433
METALS, TOTAL											
Mercury	0.14	mg/kg		0.10		SW7471B	12/26/14 13:43 / rgk	12/22/14 12:34	HGCV201-H_141226B	38	27465
METAL, DRY WEIGHT											
Aluminum	5650	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 0.065-1mm
Lab ID: H14120110-010
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Arsenic	111	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Barium	96	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Beryllium	ND	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Boron	7	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Cadmium	3.1	mg/kg-dry		0.2		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Chromium	29	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Cobalt	13	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Copper	899	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Iron	59400	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Lead	170	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Manganese	2050	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Molybdenum	ND	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Nickel	12	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Selenium	ND	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Silver	ND	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Uranium	ND	mg/kg-dry		5		SW6020	12/24/14 19:51 / sld	12/18/14 09:57	ICPMS204-B_141224B	212	27433
Vanadium	97	mg/kg-dry		1		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Zinc	1190	mg/kg-dry		5		SW6010B	12/23/14 16:18 / sld	12/18/14 09:57	ICP2-HE_141223B	91	27433
Mercury	0.17	mg/kg-dry		0.10		SW7471B	12/26/14 13:43 / rgk	12/22/14 12:34	HGCV201-H_141226B	83	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14120110-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45
DateReceived: 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
PHYSICAL CHARACTERISTICS											
No. 18 Sieve, Retained	18.6	wt% retained		0.1		ASA15-2	12/22/14 10:35 / edp		MISC SOILS_141222B	51	R103020
PHYSICAL CHARACTERISTICS											
Moisture	17.8	wt%		0.2		D2974	12/22/14 10:49 / edp		RYING OVEN 2_141219A	63	R103021
3050 EXTRACTABLE METALS											
Aluminum	3400	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Antimony	ND	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Arsenic	122	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Barium	37	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Beryllium	ND	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Boron	ND	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Cadmium	1.1	mg/kg		0.2		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Chromium	8	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Cobalt	ND	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Copper	518	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Iron	12300	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Lead	105	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Manganese	2230	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Molybdenum	ND	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Nickel	ND	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Selenium	ND	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Silver	ND	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Uranium	ND	mg/kg		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	156	27434
Vanadium	26	mg/kg		1		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
Zinc	670	mg/kg		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	133	27434
METALS, TOTAL											
Mercury	ND	mg/kg		0.10		SW7471B	12/26/14 13:46 / rgk	12/22/14 12:34	HGCV201-H_141226B	39	27465
METAL, DRY WEIGHT											
Aluminum	4130	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Natural Resource Damage Program
Client Sample ID: SS-05A Sediment Sieve 1-2mm
Lab ID: H14120110-011
Matrix: Sediment

Project: Silver Bow Creek Monitoring
Collection Date: 12/04/14 14:45 **DateReceived:** 12/05/14
Report Date: 12/31/14

Analyses	Result	Units	Qualifiers	RL	MDL	Method	Analysis Date / By	Prep Date	RunID	Run Order	BatchID
METAL, DRY WEIGHT											
Antimony	ND	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Arsenic	148	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Barium	45	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Beryllium	ND	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Boron	ND	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Cadmium	1.4	mg/kg-dry		0.2		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Chromium	9	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Cobalt	ND	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Copper	630	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Iron	15000	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Lead	128	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Manganese	2710	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Molybdenum	ND	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Nickel	ND	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Selenium	ND	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Silver	ND	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Uranium	ND	mg/kg-dry		5		SW6020	12/25/14 04:51 / sld	12/18/14 09:58	ICPMS204-B_141224B	325	27434
Vanadium	31	mg/kg-dry		1		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Zinc	816	mg/kg-dry		5		SW6010B	12/24/14 22:40 / sld	12/18/14 09:58	ICP2-HE_141224B	194	27434
Mercury	ND	mg/kg-dry		0.10		SW7471B	12/26/14 13:46 / rgk	12/22/14 12:34	HGCV201-H_141226B	84	27465

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141215wa

Date: *31-Dec-14*

Run ID :Run Order: **HGCV202-H_141215A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**

Analysis Date: **12/15/14 14:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002	0	99	90	110				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Run ID :Run Order: **HGCV202-H_141215A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**

Analysis Date: **12/15/14 14:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	103	95	105				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Run ID :Run Order: **HGCV202-H_141215A: 25** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**

Analysis Date: **12/15/14 16:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	105	90	110				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141216WA

Date: *31-Dec-14*

Run ID :Run Order: **HGCV202-H_141216A: 31** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **12/16/14 13:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00020	0.00010	0.0002	0	99	90	110				

Associated samples: **H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **HGCV202-H_141216A: 32** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV1** Method: **E245.1**
Analysis Date: **12/16/14 13:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	103	95	105				

Associated samples: **H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **HGCV202-H_141216A: 48** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E245.1**
Analysis Date: **12/16/14 14:57** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00021	0.00010	0.0002	0	105	90	110				

Associated samples: **H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **HGCV202-H_141216A: 107** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E245.1**
Analysis Date: **12/17/14 11:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00019	0.00010	0.0002	0	95	90	110				

Associated samples: **H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 141226bSA

Date: *31-Dec-14*

Run ID :Run Order: **HGCV201-H_141226B: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **SW7471B**
Analysis Date: **12/26/14 12:22** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00096	0.50	0.001	0	96	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 8** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **12/26/14 12:27** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0024	0.50	0.0025	0	96	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 30** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **12/26/14 13:24** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0026	0.50	0.0025	0	105	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 44** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **SW7471B**
Analysis Date: **12/26/14 14:01** Units: **mg/kg** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0028	0.50	0.0025	0	110	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27300

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141209B: 89** SampType: **Method Blank** Lab ID: **MB-27300** Method: **E200.7**
Analysis Date: **12/09/14 16:39** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.01									
Boron	ND	0.002									
Calcium	0.05	0.03									
Iron	ND	0.005									
Magnesium	ND	0.01									
Manganese	ND	0.0006									
Potassium	ND	0.05									
Sodium	ND	0.02									

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 90** SampType: **Laboratory Control Sample** Lab ID: **LCS-27300** Method: **E200.7**
Analysis Date: **12/09/14 16:43** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.58	0.030	2.5	0	103	85	115				
Boron	0.490	0.050	0.5	0	98	85	115				
Calcium	25.0	1.0	25	0.04986	100	85	115				
Iron	2.47	0.020	2.5	0	99	85	115				
Magnesium	24.6	1.0	25	0	99	85	115				
Manganese	2.50	0.0010	2.5	0	100	85	115				
Potassium	25.3	1.0	25	0	101	85	115				
Sodium	25.4	1.0	25	0	102	85	115				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 101** SampType: **Serial Dilution** Lab ID: **H14120110-001CDIL** Method: **E200.7**
Analysis Date: **12/09/14 17:25** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.030		0		0	0	0		10	
Boron	ND	0.050		0		0	0	0		10	
Calcium	0.177	1.0		0		0	0	0.0552		10	N
Iron	0.0345	0.027		0		0	0	0.0414		10	N
Magnesium	ND	1.0		0		0	0	0		10	
Manganese	ND	0.0032		0		0	0	0		10	
Potassium	ND	1.0		0		0	0	0		10	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27300

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141209B: 101** SampType: **Serial Dilution** Lab ID: **H14120110-001CDIL** Method: **E200.7**
Analysis Date: **12/09/14 17:25** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	ND	1.0		0		0	0	0		10	

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 102** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001CMS3** Method: **E200.7**
Analysis Date: **12/09/14 17:28** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.53	0.030	2.5	0	101	70	130				
Boron	0.512	0.050	0.5	0	102	70	130				
Calcium	25.2	1.0	25	0.0552	100	70	130				
Iron	2.51	0.020	2.5	0.0414	99	70	130				
Magnesium	25.1	1.0	25	0	100	70	130				
Manganese	2.52	0.0010	2.5	0	101	70	130				
Potassium	25.4	1.0	25	0	102	70	130				
Sodium	25.5	1.0	25	0	102	70	130				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 103** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001CMSD3** Method: **E200.7**
Analysis Date: **12/09/14 17:32** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.63	0.030	2.5	0	105	70	130	2.528	3.8	20	
Boron	0.539	0.050	0.5	0	108	70	130	0.5122	5.0	20	
Calcium	25.3	1.0	25	0.0552	101	70	130	25.16	0.5	20	
Iron	2.53	0.020	2.5	0.0414	99	70	130	2.513	0.6	20	
Magnesium	25.3	1.0	25	0	101	70	130	25.07	1.0	20	
Manganese	2.54	0.0010	2.5	0	101	70	130	2.52	0.7	20	
Potassium	25.4	1.0	25	0	102	70	130	25.41	0.0	20	
Sodium	25.6	1.0	25	0	102	70	130	25.54	0.1	20	

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27300

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 229** SampType: **Method Blank** Lab ID: **MB-27300** Method: **E200.8**

Analysis Date: **12/10/14 07:59** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.004	0.0006									
Antimony	ND	3E-05									
Arsenic	ND	6E-05									
Barium	ND	0.0002									
Beryllium	ND	5E-05									
Boron	ND	0.001									
Cadmium	ND	3E-05									
Calcium	ND	0.02									
Chromium	ND	5E-05									
Cobalt	ND	2E-05									
Copper	ND	0.0003									
Iron	0.002	0.002									
Lead	ND	3E-05									
Magnesium	ND	0.002									
Manganese	ND	0.00010									
Molybdenum	ND	3E-05									
Nickel	ND	0.0003									
Potassium	ND	0.02									
Selenium	ND	0.0002									
Silver	ND	7E-05									
Sodium	ND	0.03									
Uranium	ND	3E-05									
Vanadium	8E-05	7E-05									
Zinc	0.002	0.001									

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 230** SampType: **Laboratory Control Sample** Lab ID: **LCS-27300** Method: **E200.8**

Analysis Date: **12/10/14 08:04** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.40	0.030	2.5	0.003599	96	85	115				
Antimony	0.515	0.0010	0.5	0	103	85	115				
Arsenic	0.487	0.0010	0.5	0	97	85	115				
Barium	0.501	0.050	0.5	0	100	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27300

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 230** SampType: **Laboratory Control Sample** Lab ID: **LCS-27300** Method: **E200.8**

Analysis Date: **12/10/14 08:04** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.263	0.0010	0.25	0	105	85	115				
Boron	0.541	0.050	0.5	0	108	85	115				
Cadmium	0.257	0.0010	0.25	0	103	85	115				
Calcium	26.8	1.0	25	0	107	85	115				
Chromium	0.521	0.0050	0.5	0	104	85	115				
Cobalt	0.467	0.0050	0.5	0	93	85	115				
Copper	0.513	0.0050	0.5	0	103	85	115				
Iron	2.58	0.020	2.5	0.001887	103	85	115				
Lead	0.501	0.0010	0.5	0	100	85	115				
Magnesium	25.6	1.0	25	0	102	85	115				
Manganese	2.38	0.0010	2.5	0	95	85	115				
Molybdenum	0.517	0.0010	0.5	0	103	85	115				
Nickel	0.492	0.0050	0.5	0	98	85	115				
Potassium	25.9	1.0	25	0	104	85	115				
Selenium	0.507	0.0010	0.5	0	101	85	115				
Silver	0.0439	0.0010	0.05	0	88	85	115				
Sodium	25.9	1.0	25	0	104	85	115				
Uranium	0.500	0.00030	0.5	0	100	85	115				
Vanadium	0.506	0.010	0.5	0.0000828	101	85	115				
Zinc	0.486	0.010	0.5	0.001582	97	85	115				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 234** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001CMS3** Method: **E200.8**

Analysis Date: **12/10/14 08:22** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.40	0.030	2.5	0.001183	96	70	130				
Antimony	0.510	0.0010	0.5	0	102	70	130				
Arsenic	0.481	0.0010	0.5	0	96	70	130				
Barium	0.495	0.050	0.5	0	99	70	130				
Beryllium	0.262	0.0010	0.25	0	105	70	130				
Boron	0.531	0.050	0.5	0	106	70	130				
Cadmium	0.256	0.0010	0.25	0	102	70	130				
Calcium	26.6	1.0	25	0	107	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27300

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 234** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001CMS3** Method: **E200.8**

Analysis Date: **12/10/14 08:22** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.524	0.0050	0.5	0.0001775	105	70	130				
Cobalt	0.471	0.0050	0.5	0	94	70	130				
Copper	0.512	0.0050	0.5	0	102	70	130				
Iron	2.63	0.020	2.5	0.04962	103	70	130				
Lead	0.501	0.0010	0.5	0	100	70	130				
Magnesium	25.4	1.0	25	0	102	70	130				
Manganese	2.38	0.0010	2.5	0	95	70	130				
Molybdenum	0.508	0.0010	0.5	0.0000557	102	70	130				
Nickel	0.484	0.0050	0.5	0	97	70	130				
Potassium	26.0	1.0	25	0	104	70	130				
Selenium	0.501	0.0010	0.5	0	100	70	130				
Silver	0.0435	0.0010	0.05	0.0000788	87	70	130				
Sodium	25.4	1.0	25	0	102	70	130				
Uranium	0.492	0.00030	0.5	0.0000427	98	70	130				
Vanadium	0.511	0.010	0.5	0.0000899	102	70	130				
Zinc	0.478	0.010	0.5	0.00545	94	70	130				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 235** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001CMSD3** Method: **E200.8**

Analysis Date: **12/10/14 08:26** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.43	0.030	2.5	0.001183	97	70	130	2.395	1.6	20	
Antimony	0.514	0.0010	0.5	0	103	70	130	0.5105	0.7	20	
Arsenic	0.487	0.0010	0.5	0	97	70	130	0.4807	1.4	20	
Barium	0.501	0.050	0.5	0	100	70	130	0.4948	1.2	20	
Beryllium	0.264	0.0010	0.25	0	105	70	130	0.2615	0.8	20	
Boron	0.558	0.050	0.5	0	112	70	130	0.5314	4.9	20	
Cadmium	0.262	0.0010	0.25	0	105	70	130	0.2559	2.4	20	
Calcium	26.8	1.0	25	0	107	70	130	26.65	0.4	20	
Chromium	0.535	0.0050	0.5	0.0001775	107	70	130	0.5243	2.1	20	
Cobalt	0.479	0.0050	0.5	0	96	70	130	0.4714	1.6	20	
Copper	0.525	0.0050	0.5	0	105	70	130	0.5115	2.6	20	
Iron	2.59	0.020	2.5	0.04962	102	70	130	2.627	1.4	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27300

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 235** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001CMSD3** Method: **E200.8**

Analysis Date: **12/10/14 08:26** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E200.2**

Analytes 24	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.507	0.0010	0.5	0	101	70	130	0.5011	1.1	20	
Magnesium	26.0	1.0	25	0	104	70	130	25.45	2.3	20	
Manganese	2.46	0.0010	2.5	0	98	70	130	2.385	3.0	20	
Molybdenum	0.516	0.0010	0.5	0.0000557	103	70	130	0.5081	1.5	20	
Nickel	0.494	0.0050	0.5	0	99	70	130	0.4837	2.0	20	
Potassium	25.9	1.0	25	0	104	70	130	25.99	0.3	20	
Selenium	0.499	0.0010	0.5	0	100	70	130	0.501	0.5	20	
Silver	0.0446	0.0010	0.05	0.0000788	89	70	130	0.04354	2.4	20	
Sodium	25.9	1.0	25	0	104	70	130	25.42	1.9	20	
Uranium	0.496	0.00030	0.5	0.0000427	99	70	130	0.4917	0.8	20	
Vanadium	0.519	0.010	0.5	0.0000899	104	70	130	0.5108	1.7	20	
Zinc	0.485	0.010	0.5	0.00545	96	70	130	0.4776	1.6	20	

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27312

Date: *31-Dec-14*

Run ID :Run Order: **FIA202-HE_141208A: 71** SampType: **Laboratory Control Sample** Lab ID: **LCS-27312** Method: **E365.1**
Analysis Date: **12/08/14 15:04** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.401	0.010	0.4	0	100	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141208A: 72** SampType: **Method Blank** Lab ID: **MB-27312** Method: **E365.1**
Analysis Date: **12/08/14 15:05** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	ND	0.001									

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141208A: 86** SampType: **Sample Matrix Spike** Lab ID: **H14120109-010DMS** Method: **E365.1**
Analysis Date: **12/08/14 15:20** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.687	0.010	0.2	0.4809	103	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141208A: 87** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-010DMSD** Method: **E365.1**
Analysis Date: **12/08/14 15:21** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.681	0.010	0.2	0.4809	100	90	110	0.6866	0.8	20	

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141216A: 17** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004DMS** Method: **E365.1**
Analysis Date: **12/16/14 09:20** Units: **mg/L** **Prep Info:** Prep Date: **12/8/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.324	0.010	0.2	0.1208	101	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141216A: 18** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004DMSD** Method: **E365.1**
Analysis Date: **12/16/14 09:21** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **E365.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.324	0.010	0.2	0.1208	101	90	110	0.3236	0.0	20	

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27357

Date: *31-Dec-14*

Run ID :Run Order: **HGCV202-H_141215A: 11** SampType: **Method Blank** Lab ID: **MB-27357** Method: **E245.1**
Analysis Date: **12/15/14 15:02** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	7E-07									

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Run ID :Run Order: **HGCV202-H_141215A: 12** SampType: **Laboratory Control Sample** Lab ID: **LCS-27357** Method: **E245.1**
Analysis Date: **12/15/14 15:06** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0	97	90	110				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Run ID :Run Order: **HGCV202-H_141215A: 32** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001BMS** Method: **E245.1**
Analysis Date: **12/15/14 16:30** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00016	0.00010	0.00015	0	108	70	130				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Run ID :Run Order: **HGCV202-H_141215A: 33** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001BMSD** Method: **E245.1**
Analysis Date: **12/15/14 16:34** Units: **mg/L** **Prep Info:** Prep Date: **12/11/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	111	70	130	0.0001617	3.0	20	

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27386

Date: *31-Dec-14*

Run ID :Run Order: **HGCV202-H_141216A: 34** SampType: **Method Blank** Lab ID: **MB-27386** Method: **E245.1**
Analysis Date: **12/16/14 13:58** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	7E-07									

Associated samples:

Run ID :Run Order: **HGCV202-H_141216A: 35** SampType: **Laboratory Control Sample** Lab ID: **LCS-27386** Method: **E245.1**
Analysis Date: **12/16/14 14:02** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00015	0.00010	0.00015	0	**101**	90	110				

Associated samples:

Run ID :Run Order: **HGCV202-H_141216A: 51** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004BMS** Method: **E245.1**
Analysis Date: **12/16/14 15:10** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	**111**	70	130				

Associated samples: **H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **HGCV202-H_141216A: 52** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004BMSD** Method: **E245.1**
Analysis Date: **12/16/14 15:14** Units: **mg/L** **Prep Info:** Prep Date: **12/15/2014** Prep Method: **E245.1**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00017	0.00010	0.00015	0	**113**	70	130	0.0001668	**1.2**	20	

Associated samples: **H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27400

Date: *31-Dec-14*

Run ID :Run Order: **FIA203-HE_141217B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-27400** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:40** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	14.4	0.30	15.2	0	95	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A**

Run ID :Run Order: **FIA203-HE_141217B: 12** SampType: **Method Blank** Lab ID: **MB-27400** Method: **A4500 N-C**
Analysis Date: **12/17/14 14:41** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A**

Run ID :Run Order: **FIA203-HE_141217B: 34** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001AMS** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:07** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.02	0.10	1	0	102	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A**

Run ID :Run Order: **FIA203-HE_141217B: 35** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001AMSD** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:08** Units: **mg/L** **Prep Info:** Prep Date: **12/9/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.04	0.10	1	0	104	90	110	1.018	2.1	20	

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27401

Date: *31-Dec-14*

Run ID :Run Order: **FIA203-HE_141217B: 49** SampType: **Method Blank** Lab ID: **MB-27401** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:25** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	ND	0.02									

Associated samples: **H14120110-005A**

Run ID :Run Order: **FIA203-HE_141217B: 52** SampType: **Sample Matrix Spike** Lab ID: **H14120239-001AMS** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:29** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.26	0.10	1	0.1015	116	90	110				S

Associated samples: **H14120110-005A**

Run ID :Run Order: **FIA203-HE_141217B: 53** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120239-001AMSD** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:30** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	1.29	0.10	1	0.1015	119	90	110	1.263	2.0	20	S

Associated samples: **H14120110-005A**

Run ID :Run Order: **FIA203-HE_141217B: 62** SampType: **Laboratory Control Sample** Lab ID: **LCS-27401** Method: **A4500 N-C**
Analysis Date: **12/17/14 15:41** Units: **mg/L** **Prep Info:** Prep Date: **12/16/2014** Prep Method: **A4500 N-C**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	13.8	0.30	15.2	0	91	90	110				

Associated samples:

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 73** SampType: **Method Blank** Lab ID: **MB-27432** Method: **SW6010B**
Analysis Date: **12/24/14 18:57** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	1	0.3									
Barium	0.1	0.02									
Beryllium	ND	0.009									
Copper	ND	0.2									
Iron	5	0.6									
Manganese	0.09	0.02									
Nickel	0.1	0.07									
Vanadium	ND	0.1									
Zinc	2	0.09									

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICP2-HE_141224B: 76** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27432** Method: **SW6010B**
Analysis Date: **12/24/14 19:09** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	250	5.0	250	1.168	100	80	120				
Barium	49.0	1.0	50	0.112	98	80	120				
Beryllium	25.0	1.0	25	0	100	80	120				
Copper	48.7	1.0	50	0	97	80	120				
Iron	246	5.0	250	4.59	97	80	120				
Manganese	247	1.0	250	0.0905	99	80	120				
Nickel	48.9	1.0	50	0.114	98	80	120				
Vanadium	49.8	1.0	50	0	100	80	120				
Zinc	49.8	1.0	50	1.594	96	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICP2-HE_141224B: 77** SampType: **Laboratory Control Sample** Lab ID: **LCS-27432** Method: **SW6010B**
Analysis Date: **12/24/14 19:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	14700	5.0	14850	1.168	99	50.7	131.3				
Barium	563	1.0	620.2	0.112	91	80.6	112.2				
Beryllium	46.5	1.0	51.52	0	90	76.3	108.6				
Copper	255	1.1	282.8	0	90	77.5	109.6				
Iron	20100	5.0	23230	4.59	86	39.6	138.3				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 77** SampType: **Laboratory Control Sample** Lab ID: **LCS-27432** Method: **SW6010B**
Analysis Date: **12/24/14 19:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	363	1.0	372.7	0.0905	97	80.8	115.7				
Nickel	55.6	1.0	61.62	0.114	90	72.3	103.4				
Vanadium	68.8	1.0	73.74	0	93	66.6	107.3				
Zinc	196	1.0	215.2	1.594	90	74.2	109.9				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICP2-HE_141224B: 97** SampType: **Serial Dilution** Lab ID: **H14120110-009ADIL** Method: **SW6010B**
Analysis Date: **12/24/14 20:26** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	9840	18		0		0	0	9554	2.9	10	
Barium	164	1.0		0		0	0	159.4	2.9	10	
Beryllium	1.14	1.0		0		0	0	0.9574		10	N
Copper	957	5.8		0		0	0	933.3	2.5	10	
Iron	18100	15		0		0	0	17150	5.3	10	
Manganese	869	1.0		0		0	0	834.7	4.0	10	
Nickel	8.72	1.8		0		0	0	9.486		10	N
Vanadium	43.1	3.9		0		0	0	43.45	0.9	10	
Zinc	1030	2.5		0		0	0	985.3	4.5	10	

Associated samples:

Run ID :Run Order: **ICP2-HE_141224B: 100** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-009APDS** Method: **SW6010B**
Analysis Date: **12/24/14 20:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10800	5.0	1355	9554		75	125				A
Barium	410	1.0	271	159.4	93	75	125				
Beryllium	127	1.0	135.5	0.9574	93	75	125				
Copper	1180	1.2	271	933.3	90	75	125				
Iron	18000	5.0	1355	17150		75	125				A
Manganese	2060	1.0	1355	834.7	91	75	125				
Nickel	254	1.0	271	9.486	90	75	125				
Vanadium	298	1.0	271	43.45	94	75	125				
Zinc	1220	1.0	271	985.3	87	75	125				

Associated samples:

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 101** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009AMS** Method: **SW6010B**
Analysis Date: **12/24/14 20:41** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10700	5.0	255.1	9554		75	125				A
Barium	220	1.0	51.02	159.4	119	75	125				
Beryllium	25.6	1.0	25.51	0.9574	97	75	125				
Copper	969	1.1	51.02	933.3		75	125				A
Iron	18600	5.0	255.1	17150		75	125				A
Manganese	1100	1.0	255.1	834.7	104	75	125				
Nickel	58.5	1.0	51.02	9.486	96	75	125				
Vanadium	99.0	1.0	51.02	43.45	109	75	125				
Zinc	1070	1.0	51.02	985.3		75	125				A

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICP2-HE_141224B: 102** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW6010B**
Analysis Date: **12/24/14 20:45** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	10700	5.0	257.7	9554		75	125	10700	0.4	20	A
Barium	221	1.0	51.55	159.4	120	75	125	220	0.6	20	
Beryllium	25.7	1.0	25.77	0.9574	96	75	125	25.63	0.2	20	
Copper	923	1.1	51.55	933.3		75	125	968.9	4.9	20	A
Iron	18100	5.0	257.7	17150		75	125	18630	2.9	20	A
Manganese	1100	1.0	257.7	834.7	104	75	125	1100	0.2	20	
Nickel	58.9	1.0	51.55	9.486	96	75	125	58.47	0.7	20	
Vanadium	96.5	1.0	51.55	43.45	103	75	125	99	2.5	20	
Zinc	1120	1.0	51.55	985.3		75	125	1070	4.4	20	A

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICP2-HE_141224B: 165** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009BMS** Method: **SW6010B**
Analysis Date: **12/24/14 20:41** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	27800	8.8	662.7	24820		75	125				A
Barium	571	1.0	132.5	414.2	119	75	125				
Beryllium	66.6	1.0	66.27	2.487	97	75	125				
Copper	2520	2.9	132.5	2424		75	125				A
Iron	48400	7.8	662.7	44550		75	125				A

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 165** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009BMS** Method: **SW6010B**

Analysis Date: **12/24/14 20:41** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	2860	1.0	662.7	2168	104	75	125				
Nickel	152	1.0	132.5	24.64	96	75	125				
Vanadium	257	2.0	132.5	112.9	109	75	125				
Zinc	2780	1.2	132.5	2560		75	125				A

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICP2-HE_141224B: 166** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009BMSD** Method: **SW6010B**

Analysis Date: **12/24/14 20:45** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	27700	8.9	669.5	24820		75	125	27800	0.4	20	A
Barium	575	1.0	133.9	414.2	120	75	125	571.4	0.6	20	
Beryllium	66.7	1.0	66.95	2.487	96	75	125	66.57	0.2	20	
Copper	2400	2.9	133.9	2424		75	125	2517	4.9	20	A
Iron	47000	7.9	669.5	44550		75	125	48390	2.9	20	A
Manganese	2860	1.0	669.5	2168	104	75	125	2858	0.2	20	
Nickel	153	1.0	133.9	24.64	96	75	125	151.9	0.7	20	
Vanadium	251	2.0	133.9	112.9	103	75	125	257.2	2.5	20	
Zinc	2900	1.2	133.9	2560		75	125	2779	4.4	20	A

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 74** SampType: **Method Blank** Lab ID: **MB-27432** Method: **SW6020**
Analysis Date: **12/24/14 22:18** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Boron	ND	4									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICPMS204-B_141224B: 75** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27432** Method: **SW6020**
Analysis Date: **12/24/14 22:23** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.2	1.0	50	0	**92**	80	120				
Arsenic	49.8	1.0	50	0	**100**	80	120				
Boron	42.8	4.5	50	0	**86**	80	120				
Cadmium	24.9	1.0	25	0	**100**	80	120				
Chromium	49.3	1.0	50	0	**99**	80	120				
Cobalt	46.2	1.0	50	0	**92**	80	120				
Lead	45.3	1.0	50	0	**91**	80	120				
Molybdenum	44.7	1.0	50	0	**89**	80	120				
Selenium	55.0	1.0	50	0	**110**	80	120				
Silver	23.2	1.0	25	0	**93**	80	120				
Uranium	45.2	1.0	50	0	**90**	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICPMS204-B_141224B: 78** SampType: **Laboratory Control Sample** Lab ID: **LCS-27432** Method: **SW6020**
Analysis Date: **12/24/14 22:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.9	1.0	127.3	0	**36**	2.2	92.9				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 78** SampType: **Laboratory Control Sample** Lab ID: **LCS-27432** Method: **SW6020**
Analysis Date: **12/24/14 22:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	312	1.0	346.5	0	90	72.3	106.4				
Boron	74.5	4.5	94.14	0	79	59.4	101.9				
Cadmium	127	1.0	138.4	0	92	73	105.1				
Chromium	78.2	1.0	76.77	0	102	72.8	109.1				
Cobalt	52.4	1.0	57.98	0	90	73.3	103.7				
Lead	186	1.0	188.9	0	99	75.9	108.6				
Molybdenum	152	1.0	173.7	0	87	68.6	105.8				
Selenium	208	1.0	198	0	105	72.5	112.2				
Silver	65.5	1.0	69.7	0	94	67.8	112.8				
Uranium	114	1.0	101	0	113	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICPMS204-B_141224B: 122** SampType: **Serial Dilution** Lab ID: **H14120110-009ADIL** Method: **SW6020**
Analysis Date: **12/25/14 02:08** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0		0		0	0	0.8505		10	
Arsenic	8.49	1.7		0		0	0	85.08		10	N
Boron	ND	24		0		0	0	0		10	
Cadmium	ND	1.0		0		0	0	3.795		10	
Chromium	2.72	1.1		0		0	0	24.29		10	N
Cobalt	0.525	1.0		0		0	0	4.366		10	N
Lead	23.3	1.2		0		0	0	220.3	160	10	R
Molybdenum	1.26	1.0		0		0	0	10.2		10	N
Selenium	ND	1.9		0		0	0	0.7095		10	
Silver	ND	1.4		0		0	0	3.876		10	
Uranium	ND	1.0		0		0	0	3.161		10	

Associated samples:

Run ID :Run Order: **ICPMS204-B_141224B: 123** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-009APDS** Method: **SW6020**
Analysis Date: **12/25/14 02:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2640	1.0	2632	0.8505	100	75	125				
Arsenic	2650	1.0	2632	85.08	97	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 123** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-009APDS** Method: **SW6020**

Analysis Date: **12/25/14 02:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2430	4.7	2632	0	92	75	125				
Cadmium	1230	1.0	1316	3.795	93	75	125				
Chromium	2580	1.0	2632	24.29	97	75	125				
Cobalt	2410	1.0	2632	4.366	91	75	125				
Lead	2770	1.0	2632	220.3	97	75	125				
Molybdenum	2590	1.0	2632	10.2	98	75	125				
Selenium	2690	1.0	2632	0.7095	102	75	125				
Silver	160	1.0	1316	3.876	12	75	125				S
Uranium	2590	1.0	2632	3.161	98	75	125				

Associated samples:

Run ID :Run Order: **ICPMS204-B_141224B: 124** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009AMS** Method: **SW6020**

Analysis Date: **12/25/14 02:17** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.6	1.0	51.02	0.8505	41	75	125				S
Arsenic	136	1.0	51.02	85.08	100	75	125				
Boron	61.6	4.6	51.02	0	121	75	125				
Cadmium	27.1	1.0	25.51	3.795	91	75	125				
Chromium	76.5	1.0	51.02	24.29	102	75	125				
Cobalt	49.8	1.0	51.02	4.366	89	75	125				
Lead	272	1.0	51.02	220.3		75	125				A
Molybdenum	55.8	1.0	51.02	10.2	89	75	125				
Selenium	56.6	1.0	51.02	0.7095	109	75	125				
Silver	26.5	1.0	25.51	3.876	89	75	125				
Uranium	48.9	1.0	51.02	3.161	90	75	125				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Run ID :Run Order: **ICPMS204-B_141224B: 125** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW6020**

Analysis Date: **12/25/14 02:22** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	21.5	1.0	51.55	0.8505	40	75	125	21.61	0.4	20	S
Arsenic	132	1.0	51.55	85.08	92	75	125	136.3	2.9	20	
Boron	55.6	4.6	51.55	0	108	75	125	61.58	10	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27432

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 125** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW6020**

Analysis Date: **12/25/14 02:22** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	29.3	1.0	25.77	3.795	99	75	125	27.09	7.8	20	
Chromium	75.1	1.0	51.55	24.29	99	75	125	76.45	1.7	20	
Cobalt	54.0	1.0	51.55	4.366	96	75	125	49.8	8.0	20	
Lead	282	1.0	51.55	220.3		75	125	272.4	3.3	20	A
Molybdenum	59.7	1.0	51.55	10.2	96	75	125	55.84	6.7	20	
Selenium	54.4	1.0	51.55	0.7095	104	75	125	56.56	3.9	20	
Silver	29.2	1.0	25.77	3.876	98	75	125	26.53	9.6	20	
Uranium	52.8	1.0	51.55	3.161	96	75	125	48.93	7.6	20	

Associated samples: **H14120110-006A, H14120110-006B, H14120110-009A, H14120110-009B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141223B: 19** SampType: **Method Blank** Lab ID: **MB-27433** Method: **SW6010B**
Analysis Date: **12/23/14 13:59** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2	0.3									
Barium	0.2	0.02									
Beryllium	ND	0.009									
Boron	0.3	0.1									
Copper	2	0.2									
Iron	6	0.6									
Manganese	0.2	0.02									
Vanadium	ND	0.1									
Zinc	4	0.09									

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 20** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27433** Method: **SW6010B**
Analysis Date: **12/23/14 14:03** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	252	5.0	250	1.533	100	80	120				
Barium	49.5	1.0	50	0.1935	99	80	120				
Beryllium	24.9	1.0	25	0	100	80	120				
Boron	45.4	1.0	50	0.269	90	80	120				
Copper	48.9	1.0	50	2.002	94	80	120				
Iron	241	5.0	250	6.188	94	80	120				
Manganese	237	1.0	250	0.1575	95	80	120				
Vanadium	49.0	1.0	50	0	98	80	120				
Zinc	47.8	1.0	50	3.722	88	80	120				

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6010B**
Analysis Date: **12/23/14 14:07** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13700	5.0	14700	1.533	93	50.7	131.3				
Barium	588	1.0	614	0.1935	96	80.6	112.2				
Beryllium	47.8	1.0	51	0	94	76.3	108.6				
Boron	75.1	1.0	93.2	0.269	80	59.4	101.9				
Copper	263	1.1	280	2.002	93	77.5	109.6				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141223B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6010B**
Analysis Date: **12/23/14 14:07** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	19500	5.0	23000	6.188	85	39.6	138.3				
Manganese	374	1.0	369	0.1575	101	80.8	115.7				
Vanadium	65.7	1.0	73	0	90	66.6	107.3				
Zinc	199	1.0	213	3.722	91	74.2	109.9				

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 56** SampType: **Serial Dilution** Lab ID: **H14120110-010ADIL** Method: **SW6010B**
Analysis Date: **12/23/14 16:22** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4680	16		0		0	0	4516	3.5	10	
Barium	79.6	1.0		0		0	0	76.76	3.6	10	
Beryllium	0.236	1.0		0		0	0	0.2751		10	N
Boron	8.53	2.5		0		0	0	5.811		10	N
Copper	757	5.3		0		0	0	718.9	5.2	10	
Iron	52400	14		0		0	0	47470	9.8	10	
Manganese	1750	1.0		0		0	0	1636	7.0	10	
Vanadium	79.6	3.6		0		0	0	77.47	2.8	10	
Zinc	1010	2.2		0		0	0	950.6	5.7	10	

Associated samples:

Run ID :Run Order: **ICP2-HE_141223B: 57** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-010APDS** Method: **SW6010B**
Analysis Date: **12/23/14 16:26** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5840	5.0	1232	4516	107	75	125				
Barium	308	1.0	246.4	76.76	94	75	125				
Beryllium	116	1.0	123.2	0.2751	94	75	125				
Boron	244	1.0	246.4	5.811	96	75	125				
Copper	971	1.1	246.4	718.9	102	75	125				
Iron	50400	5.0	1232	47470		75	125				A
Manganese	2820	1.0	1232	1636	96	75	125				
Vanadium	309	1.0	246.4	77.47	94	75	125				
Zinc	1230	1.0	246.4	950.6	115	75	125				

Associated samples:

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141223B: 58** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010AMS** Method: **SW6010B**
Analysis Date: **12/23/14 16:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5040	5.0	238.5	4516		75	125				A
Barium	106	1.0	47.71	76.76	62	75	125				S
Beryllium	23.6	1.0	23.85	0.2751	98	75	125				
Boron	45.4	1.0	47.71	5.811	83	75	125				
Copper	675	1.0	47.71	718.9		75	125				A
Iron	48800	5.0	238.5	47470		75	125				A
Manganese	838	1.0	238.5	1636		75	125				A
Vanadium	116	1.0	47.71	77.47	82	75	125				
Zinc	1150	1.0	47.71	950.6		75	125				A

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 59** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010AMSD** Method: **SW6010B**
Analysis Date: **12/23/14 16:33** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5240	5.0	243.4	4516		75	125	5036	4.1	20	A
Barium	110	1.0	48.69	76.76	68	75	125	106.2	3.3	20	S
Beryllium	24.0	1.0	24.34	0.2751	97	75	125	23.57	1.8	20	
Boron	46.8	1.0	48.69	5.811	84	75	125	45.41	3.1	20	
Copper	701	1.1	48.69	718.9		75	125	674.7	3.8	20	A
Iron	47000	5.0	243.4	47470		75	125	48850	3.8	20	A
Manganese	959	1.0	243.4	1636		75	125	837.8	14	20	A
Vanadium	115	1.0	48.69	77.47	78	75	125	116.4	0.9	20	
Zinc	932	1.0	48.69	950.6		75	125	1152	21	20	AR

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 94** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010BMS** Method: **SW6010B**
Analysis Date: **12/23/14 16:29** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6300	5.0	298.3	5647		75	125				A
Barium	133	1.0	59.67	95.99	62	75	125				S
Beryllium	29.5	1.0	29.83	0.3441	98	75	125				
Boron	56.8	1.0	59.67	7.267	83	75	125				
Copper	844	1.3	59.67	899.1		75	125				A

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141223B: 94** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010BMS** Method: **SW6010B**

Analysis Date: **12/23/14 16:29** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	61100	5.0	298.3	59370		75	125				A
Manganese	1050	1.0	298.3	2046		75	125				A
Vanadium	146	1.0	59.67	96.89	82	75	125				
Zinc	1440	1.0	59.67	1189		75	125				A

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 95** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010BMSD** Method: **SW6010B**

Analysis Date: **12/23/14 16:33** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	6560	5.0	304.4	5647		75	125	6298	4.1	20	A
Barium	137	1.0	60.89	95.99	68	75	125	132.8	3.3	20	S
Beryllium	30.0	1.0	30.44	0.3441	97	75	125	29.47	1.8	20	
Boron	58.6	1.0	60.89	7.267	84	75	125	56.79	3.1	20	
Copper	877	1.3	60.89	899.1		75	125	843.8	3.8	20	A
Iron	58800	5.0	304.4	59370		75	125	61090	3.8	20	A
Manganese	1200	1.0	304.4	2046		75	125	1048	14	20	A
Vanadium	144	1.0	60.89	96.89	78	75	125	145.6	0.9	20	
Zinc	1170	1.0	60.89	1189		75	125	1441	21	20	AR

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 17** SampType: **Method Blank** Lab ID: **MB-27433** Method: **SW6020**
Analysis Date: **12/24/14 17:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Nickel	ND	0.9									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICPMS204-B_141224B: 18** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27433** Method: **SW6020**
Analysis Date: **12/24/14 17:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.9	1.0	50	0	96	80	120				
Arsenic	47.8	1.0	50	0	96	80	120				
Cadmium	25.4	1.0	25	0	102	80	120				
Chromium	47.8	1.0	50	0	96	80	120				
Cobalt	47.4	1.0	50	0	95	80	120				
Lead	47.4	1.0	50	0	95	80	120				
Molybdenum	47.4	1.0	50	0	95	80	120				
Nickel	50.0	1.0	50	0	100	80	120				
Selenium	51.1	1.0	50	0	102	80	120				
Silver	23.8	1.0	25	0	95	80	120				
Uranium	47.2	1.0	50	0	95	80	120				

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICPMS204-B_141224B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6020**
Analysis Date: **12/24/14 18:07** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.7	1.0	126	0	37	2.2	92.9				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 21** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6020**
Analysis Date: **12/24/14 18:07** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	321	1.0	343	0	94	72.3	106.4				
Cadmium	141	1.0	137	0	103	73	105.1				
Chromium	77.7	1.0	76	0	102	72.8	109.1				
Cobalt	59.2	1.0	57.4	0	103	73.3	103.7				
Lead	203	1.0	187	0	108	75.9	108.6				
Molybdenum	159	1.0	172	0	92	68.6	105.8				
Nickel	62.6	1.0	61	0	103	72.3	103.4				
Selenium	210	1.0	196	0	107	72.5	112.2				
Silver	70.6	1.0	69	0	102	67.8	112.8				

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICPMS204-B_141224B: 48** SampType: **Serial Dilution** Lab ID: **H14120110-010ADIL** Method: **SW6020**
Analysis Date: **12/24/14 20:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.620	1.0		0		0	0	0.7555		10	N
Arsenic	87.5	1.5		0		0	0	88.9	1.6	10	
Cadmium	2.61	1.0		0		0	0	2.5		10	N
Chromium	23.9	1.0		0		0	0	23.46	2.1	10	
Cobalt	10.2	1.0		0		0	0	10.2	0.5	10	
Lead	138	1.1		0		0	0	136.3	1.1	10	
Molybdenum	2.53	1.0		0		0	0	2.538		10	N
Nickel	9.16	4.4		0		0	0	9.206		10	N
Selenium	ND	1.7		0		0	0	1.292		10	
Silver	2.96	1.3		0		0	0	3.019		10	N
Uranium	2.62	1.0		0		0	0	2.653		10	N

Associated samples:

Run ID :Run Order: **ICPMS204-B_141224B: 49** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-010APDS** Method: **SW6020**
Analysis Date: **12/24/14 20:20** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2350	1.0	2392	0.7555	98	75	125				
Arsenic	2340	1.0	2392	88.9	94	75	125				
Cadmium	1150	1.0	1196	2.5	96	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 49** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-010APDS** Method: **SW6020**

Analysis Date: **12/24/14 20:20** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2260	1.0	2392	23.46	93	75	125				
Cobalt	2180	1.0	2392	10.2	91	75	125				
Lead	2420	1.0	2392	136.3	95	75	125				
Molybdenum	2320	1.0	2392	2.538	97	75	125				
Nickel	2270	1.0	2392	9.206	94	75	125				
Selenium	2330	1.0	2392	1.292	97	75	125				
Silver	809	1.0	1196	3.019	67	75	125				S
Uranium	2370	1.0	2392	2.653	99	75	125				

Associated samples:

Run ID :Run Order: **ICPMS204-B_141224B: 50** SampType: **Sample Matrix Spike** Lab ID: **H14120110-010AMS** Method: **SW6020**

Analysis Date: **12/24/14 20:24** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	33.5	1.0	47.71	0.7555	69	75	125				S
Arsenic	128	1.0	47.71	88.9	81	75	125				
Cadmium	27.4	1.0	23.85	2.5	104	75	125				
Chromium	70.1	1.0	47.71	23.46	98	75	125				
Cobalt	57.8	1.0	47.71	10.2	100	75	125				
Lead	182	1.0	47.71	136.3	96	75	125				
Molybdenum	51.4	1.0	47.71	2.538	102	75	125				
Nickel	58.7	1.0	47.71	9.206	104	75	125				
Selenium	53.7	1.0	47.71	1.292	110	75	125				
Silver	27.2	1.0	23.85	3.019	102	75	125				
Uranium	48.9	1.0	47.71	2.653	97	75	125				

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICPMS204-B_141224B: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010AMSD** Method: **SW6020**

Analysis Date: **12/24/14 20:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	29.4	1.0	48.69	0.7555	59	75	125	33.52	13	20	S
Arsenic	131	1.0	48.69	88.9	86	75	125	127.6	2.5	20	
Cadmium	27.1	1.0	24.34	2.5	101	75	125	27.39	1.1	20	
Chromium	70.1	1.0	48.69	23.46	96	75	125	70.09	0.0	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27433

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 51** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-010AMSD** Method: **SW6020**
Analysis Date: **12/24/14 20:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cobalt	57.2	1.0	48.69	10.2	96	75	125	57.82	1.1	20	
Lead	206	1.0	48.69	136.3	143	75	125	182.3	12	20	S
Molybdenum	50.8	1.0	48.69	2.538	99	75	125	51.41	1.1	20	
Nickel	58.9	1.0	48.69	9.206	102	75	125	58.66	0.4	20	
Selenium	53.2	1.0	48.69	1.292	107	75	125	53.75	0.9	20	
Silver	28.1	1.0	24.34	3.019	103	75	125	27.24	3.0	20	
Uranium	51.3	1.0	48.69	2.653	100	75	125	48.9	4.9	20	

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICPMS204-B_141229A: 18** SampType: **Method Blank** Lab ID: **MB-27433** Method: **SW6020**
Analysis Date: **12/29/14 12:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	0.2	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Nickel	ND	0.9									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICPMS204-B_141229A: 19** SampType: **Laboratory Control Sample** Lab ID: **LCS-27433** Method: **SW6020**
Analysis Date: **12/29/14 12:19** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	119	1.0	100	0	119	80	120				

Associated samples: **H14120110-007B, H14120110-010A, H14120110-010B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 103** SampType: **Method Blank** Lab ID: **MB-27434** Method: **SW6010B**
Analysis Date: **12/24/14 20:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.5	0.02									
Beryllium	0.010	0.009									
Boron	ND	0.1									
Copper	ND	0.2									
Iron	3	0.6									
Manganese	0.08	0.02									
Nickel	ND	0.07									
Vanadium	ND	0.1									
Zinc	0.8	0.09									

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 104** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27434** Method: **SW6010B**
Analysis Date: **12/24/14 20:52** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	250	5.0	250	0	100	80	120				
Barium	49.1	1.0	50	0.518	97	80	120				
Beryllium	24.8	1.0	25	0.0095	99	80	120				
Boron	48.8	1.0	50	0	98	80	120				
Copper	48.5	1.0	50	0	97	80	120				
Iron	245	5.0	250	3	97	80	120				
Manganese	244	1.0	250	0.079	98	80	120				
Nickel	49.0	1.0	50	0	98	80	120				
Vanadium	49.3	1.0	50	0	99	80	120				
Zinc	49.5	1.0	50	0.844	97	80	120				

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 105** SampType: **Laboratory Control Sample** Lab ID: **LCS-27434** Method: **SW6010B**
Analysis Date: **12/24/14 20:56** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13600	5.0	14000	0	97	50.7	131.3				
Barium	547	1.0	584.8	0.518	94	80.6	112.2				
Beryllium	44.8	1.0	48.57	0.0095	92	76.3	108.6				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 105** SampType: **Laboratory Control Sample** Lab ID: **LCS-27434** Method: **SW6010B**
Analysis Date: **12/24/14 20:56** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	74.0	1.0	88.76	0	83	59.4	101.9				
Copper	245	1.0	266.7	0	92	77.5	109.6				
Iron	18600	5.0	21900	3	85	39.6	138.3				
Manganese	367	1.0	351.4	0.079	104	80.8	115.7				
Nickel	52.4	1.0	58.1	0	90	72.3	103.4				
Vanadium	64.3	1.0	69.52	0	92	66.6	107.3				
Zinc	188	1.0	202.9	0.844	92	74.2	109.9				

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 134** SampType: **Serial Dilution** Lab ID: **H14120110-011ADIL** Method: **SW6010B**
Analysis Date: **12/24/14 22:44** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3440	18		0		0	0	3395	1.2	10	
Barium	37.9	1.0		0		0	0	36.84	2.8	10	
Beryllium	0.421	1.0		0		0	0	0.3679		10	N
Boron	5.74	2.7		0		0	0	1.914		10	N
Copper	531	5.8		0		0	0	517.7	2.6	10	
Iron	12700	15		0		0	0	12330	3.0	10	
Manganese	2290	1.0		0		0	0	2226	3.0	10	
Nickel	7.73	1.8		0		0	0	4.053		10	N
Vanadium	24.1	3.9		0		0	0	25.56		10	N
Zinc	662	2.5		0		0	0	670.4	1.2	10	

Associated samples:

Run ID :Run Order: **ICP2-HE_141224B: 135** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-011APDS** Method: **SW6010B**
Analysis Date: **12/24/14 22:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4730	5.0	1355	3395	98	75	125				
Barium	296	1.0	271	36.84	95	75	125				
Beryllium	131	1.0	135.5	0.3679	96	75	125				
Boron	260	1.0	271	1.914	95	75	125				
Copper	775	1.2	271	517.7	95	75	125				
Iron	13300	5.0	1355	12330		75	125				A

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 135** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-011APDS** Method: **SW6010B**

Analysis Date: **12/24/14 22:48** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese	3480	1.0	1355	2226	92	75	125				
Nickel	260	1.0	271	4.053	94	75	125				
Vanadium	288	1.0	271	25.56	97	75	125				
Zinc	900	1.0	271	670.4	85	75	125				

Associated samples:

Run ID :Run Order: **ICP2-HE_141224B: 136** SampType: **Sample Matrix Spike** Lab ID: **H14120110-011AMS** Method: **SW6010B**

Analysis Date: **12/24/14 22:52** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4920	5.0	263.2	3395		75	125				A
Barium	109	1.0	52.63	36.84	137	75	125				S
Beryllium	26.8	1.0	26.32	0.3679	101	75	125				
Boron	50.9	1.0	52.63	1.914	93	75	125				
Copper	1230	1.2	52.63	517.7		75	125				A
Iron	12100	5.0	263.2	12330		75	125				A
Manganese	542	1.0	263.2	2226		75	125				A
Nickel	54.6	1.0	52.63	4.053	96	75	125				
Vanadium	70.1	1.0	52.63	25.56	85	75	125				
Zinc	1730	1.0	52.63	670.4		75	125				A

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 137** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011AMSD** Method: **SW6010B**

Analysis Date: **12/24/14 22:55** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4740	5.0	263.2	3395		75	125	4920	3.8	20	A
Barium	271	1.0	52.63	36.84	446	75	125	108.9	85	20	SR
Beryllium	26.6	1.0	26.32	0.3679	100	75	125	26.82	0.9	20	
Boron	52.0	1.0	52.63	1.914	95	75	125	50.93	2.0	20	
Copper	566	1.2	52.63	517.7		75	125	1234	74	20	AR
Iron	12800	5.0	263.2	12330		75	125	12070	6.2	20	A
Manganese	3090	1.0	263.2	2226		75	125	542.4	140	20	AR
Nickel	54.1	1.0	52.63	4.053	95	75	125	54.59	0.9	20	
Vanadium	83.0	1.0	52.63	25.56	109	75	125	70.12	17	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 137** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011AMSD** Method: **SW6010B**
Analysis Date: **12/24/14 22:55** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	834	1.0	52.63	670.4		75	125	1733	70	20	AR

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 197** SampType: **Sample Matrix Spike** Lab ID: **H14120110-011BMS** Method: **SW6010B**
Analysis Date: **12/24/14 22:52** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5990	5.0	320.3	4132		75	125				A
Barium	133	1.0	64.06	44.83	137	75	125				S
Beryllium	32.6	1.0	32.03	0.4478	101	75	125				
Boron	62.0	1.0	64.06	2.33	93	75	125				
Copper	1500	1.4	64.06	630.1		75	125				A
Iron	14700	5.0	320.3	15000		75	125				A
Manganese	660	1.0	320.3	2710		75	125				A
Nickel	66.4	1.0	64.06	4.933	96	75	125				
Vanadium	85.3	1.0	64.06	31.11	85	75	125				
Zinc	2110	1.0	64.06	815.9		75	125				A

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 198** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011BMSD** Method: **SW6010B**
Analysis Date: **12/24/14 22:55** Units: **mg/kg-dry** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5770	5.0	320.3	4132		75	125	5989	3.8	20	A
Barium	330	1.0	64.06	44.83	446	75	125	132.5	85	20	SR
Beryllium	32.3	1.0	32.03	0.4478	100	75	125	32.65	0.9	20	
Boron	63.3	1.0	64.06	2.33	95	75	125	61.99	2.0	20	
Copper	689	1.4	64.06	630.1		75	125	1501	74	20	AR
Iron	15600	5.0	320.3	15000		75	125	14690	6.2	20	A
Manganese	3760	1.0	320.3	2710		75	125	660.2	140	20	AR
Nickel	65.8	1.0	64.06	4.933	95	75	125	66.44	0.9	20	
Vanadium	101	1.0	64.06	31.11	109	75	125	85.34	17	20	
Zinc	1010	1.0	64.06	815.9		75	125	2109	70	20	AR

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 130** SampType: **Method Blank** Lab ID: **MB-27434** Method: **SW6020**
Analysis Date: **12/25/14 02:46** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.1	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICPMS204-B_141224B: 131** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27434** Method: **SW6020**
Analysis Date: **12/25/14 02:51** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.9	1.0	50	0.1358	95	80	120				
Arsenic	48.0	1.0	50	0	96	80	120				
Cadmium	25.1	1.0	25	0	100	80	120				
Chromium	48.0	1.0	50	0	96	80	120				
Cobalt	47.3	1.0	50	0	95	80	120				
Lead	47.1	1.0	50	0	94	80	120				
Molybdenum	46.4	1.0	50	0	93	80	120				
Selenium	50.7	1.0	50	0	101	80	120				
Silver	23.8	1.0	25	0	95	80	120				
Uranium	45.9	1.0	50	0	92	80	120				

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICPMS204-B_141224B: 134** SampType: **Laboratory Control Sample** Lab ID: **LCS-27434** Method: **SW6020**
Analysis Date: **12/25/14 03:05** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	43.2	1.0	120	0.1358	36	2.2	92.9				
Arsenic	304	1.0	326.7	0	93	72.3	106.4				
Cadmium	126	1.0	130.5	0	97	73	105.1				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 134** SampType: **Laboratory Control Sample** Lab ID: **LCS-27434** Method: **SW6020**
Analysis Date: **12/25/14 03:05** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	75.2	1.0	72.38	0	104	72.8	109.1				
Cobalt	54.0	1.0	54.67	0	99	73.3	103.7				
Lead	187	1.0	178.1	0	105	75.9	108.6				
Molybdenum	149	1.0	163.8	0	91	68.6	105.8				
Selenium	192	1.0	186.7	0	103	72.5	112.2				
Silver	67.3	1.0	65.71	0	102	67.8	112.8				
Uranium	114	1.0	95.24	0	119	80	120				

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICPMS204-B_141224B: 161** SampType: **Serial Dilution** Lab ID: **H14120110-011ADIL** Method: **SW6020**
Analysis Date: **12/25/14 05:15** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.48	1.0		0		0	0	2.705		10	N
Arsenic	123	1.7		0		0	0	122	0.5	10	
Cadmium	1.10	1.0		0		0	0	1.113		10	N
Chromium	7.98	1.1		0		0	0	7.789		10	N
Cobalt	2.31	1.0		0		0	0	2.383		10	N
Lead	106	1.2		0		0	0	105	0.5	10	
Molybdenum	1.19	1.0		0		0	0	1.209		10	N
Selenium	ND	1.9		0		0	0	0		10	
Silver	2.50	1.4		0		0	0	2.653		10	N
Uranium	2.57	1.0		0		0	0	2.491		10	N

Associated samples:

Run ID :Run Order: **ICPMS204-B_141224B: 162** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-011APDS** Method: **SW6020**
Analysis Date: **12/25/14 05:20** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2660	1.0	2632	2.705	101	75	125				
Arsenic	2580	1.0	2632	122	94	75	125				
Cadmium	1300	1.0	1316	1.113	99	75	125				
Chromium	2500	1.0	2632	7.789	95	75	125				
Cobalt	2420	1.0	2632	2.383	92	75	125				
Lead	2680	1.0	2632	105	98	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 162** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120110-011APDS** Method: **SW6020**

Analysis Date: **12/25/14 05:20** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	2600	1.0	2632	1.209	99	75	125				
Selenium	2500	1.0	2632	0	95	75	125				
Silver	841	1.0	1316	2.653	64	75	125				S
Uranium	2640	1.0	2632	2.491	100	75	125				

Associated samples:

Run ID :Run Order: **ICPMS204-B_141224B: 163** SampType: **Sample Matrix Spike** Lab ID: **H14120110-011AMS** Method: **SW6020**

Analysis Date: **12/25/14 05:24** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	34.4	1.0	52.63	2.705	60	75	125				S
Arsenic	166	1.0	52.63	122	84	75	125				
Cadmium	32.2	1.0	26.32	1.113	118	75	125				
Chromium	58.8	1.0	52.63	7.789	97	75	125				
Cobalt	54.3	1.0	52.63	2.383	99	75	125				
Lead	306	1.0	52.63	105	383	75	125				S
Molybdenum	52.7	1.0	52.63	1.209	98	75	125				
Selenium	59.0	1.0	52.63	0	112	75	125				
Silver	30.7	1.0	26.32	2.653	107	75	125				
Uranium	52.6	1.0	52.63	2.491	95	75	125				

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICPMS204-B_141224B: 164** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011AMSD** Method: **SW6020**

Analysis Date: **12/25/14 05:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	31.5	1.0	52.63	2.705	55	75	125	34.42	8.8	20	S
Arsenic	174	1.0	52.63	122	98	75	125	166.2	4.4	20	
Cadmium	28.1	1.0	26.32	1.113	103	75	125	32.18	13	20	
Chromium	59.2	1.0	52.63	7.789	98	75	125	58.79	0.7	20	
Cobalt	55.8	1.0	52.63	2.383	102	75	125	54.26	2.9	20	
Lead	355	1.0	52.63	105	476	75	125	306.3	15	20	S
Molybdenum	54.9	1.0	52.63	1.209	102	75	125	52.68	4.1	20	
Selenium	55.8	1.0	52.63	0	106	75	125	59	5.6	20	
Silver	29.1	1.0	26.32	2.653	100	75	125	30.71	5.5	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27434

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 164** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-011AMSD** Method: **SW6020**

Analysis Date: **12/25/14 05:29** Units: **mg/kg** **Prep Info:** Prep Date: **12/18/2014** Prep Method: **SW3050 B**

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Uranium	54.1	1.0	52.63	2.491	98	75	125	52.55	3.0	20	

Associated samples: **H14120110-008A, H14120110-008B, H14120110-011A, H14120110-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27465

Date: *31-Dec-14*

Run ID :Run Order: **HGCV201-H_141226B: 10** SampType: **Method Blank** Lab ID: **MB-27465** Method: **SW7471B**
Analysis Date: **12/26/14 12:33** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0003									

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 11** SampType: **Laboratory Control Sample** Lab ID: **LCS-27465** Method: **SW7471B**
Analysis Date: **12/26/14 12:35** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	5.0	0.50	5	0	100	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 12** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27465** Method: **SW7471B**
Analysis Date: **12/26/14 12:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.1	0.50	1	0	113	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 27** SampType: **Sample Matrix Spike** Lab ID: **H14120109-055AMS** Method: **SW7471B**
Analysis Date: **12/26/14 13:17** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.9872	0.106	120	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 28** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-055AMSD** Method: **SW7471B**
Analysis Date: **12/26/14 13:19** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.3	0.50	0.9872	0.106	124	80	120	1.295	2.4	20	S

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27465

Date: *31-Dec-14*

Run ID :Run Order: **HGCV201-H_141226B: 41** SampType: **Sample Matrix Spike** Lab ID: **H14120110-009AMS** Method: **SW7471B**

Analysis Date: **12/26/14 13:53** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.6	0.50	0.993	0.4772	117	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **HGCV201-H_141226B: 42** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-009AMSD** Method: **SW7471B**

Analysis Date: **12/26/14 13:56** Units: **mg/kg** **Prep Info:** Prep Date: **12/22/2014** Prep Method: **SW7471A**

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.8	0.50	0.9921	0.4772	138	80	120	1.643	11	20	S

Associated samples: **H14120110-006A, H14120110-006B, H14120110-007A, H14120110-007B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141229B: 22** SampType: **Method Blank** Lab ID: **MB-27491** Method: **SW6010B**
Analysis Date: **12/29/14 11:52** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.7									
Barium	0.3	0.02									
Beryllium	ND	0.009									
Boron	ND	0.1									
Copper	0.4	0.2									
Iron	10	0.6									
Manganese	0.06	0.02									
Vanadium	ND	0.1									
Zinc	0.4	0.09									

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICP2-HE_141229B: 23** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27491** Method: **SW6010B**
Analysis Date: **12/29/14 11:56** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	248	5.0	250	0	99	80	120				
Barium	49.7	1.0	50	0.302	99	80	120				
Beryllium	25.6	1.0	25	0	103	80	120				
Boron	49.2	1.0	50	0	98	80	120				
Copper	49.3	1.0	50	0.375	98	80	120				
Iron	258	5.0	250	10.1	99	80	120				
Manganese	250	1.0	250	0.0575	100	80	120				
Vanadium	51.0	1.0	50	0	102	80	120				
Zinc	51.1	1.0	50	0.391	101	80	120				

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICP2-HE_141229B: 24** SampType: **Laboratory Control Sample** Lab ID: **LCS-27491** Method: **SW6010B**
Analysis Date: **12/29/14 12:00** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12900	5.0	14000	0	92	50.7	131.3				
Barium	559	1.0	584.8	0.302	96	80.6	112.2				
Beryllium	47.9	1.0	48.57	0	99	76.3	108.6				
Boron	79.1	1.0	88.76	0	89	59.4	101.9				
Copper	256	1.0	266.7	0.375	96	77.5	109.6				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141229B: 24** SampType: **Laboratory Control Sample** Lab ID: **LCS-27491** Method: **SW6010B**
Analysis Date: **12/29/14 12:00** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	20100	5.0	21900	10.1	92	39.6	138.3				
Manganese	382	1.0	351.4	0.0575	109	80.8	115.7				
Vanadium	65.3	1.0	69.52	0	94	66.6	107.3				
Zinc	205	1.0	202.9	0.391	101	74.2	109.9				

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICP2-HE_141229B: 55** SampType: **Serial Dilution** Lab ID: **H14120241-053ADIL** Method: **SW6010B**
Analysis Date: **12/29/14 13:28** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	11400	18		0		0	0	11210	2.0	10	
Barium	184	1.0		0		0	0	177.8	3.3	10	
Beryllium	0.592	1.0		0		0	0	0.5963		10	N
Boron	ND	2.7		0		0	0	2.245		10	
Copper	79.4	5.8		0		0	0	80.4	1.3	10	
Iron	16500	15		0		0	0	16000	3.0	10	
Manganese	217	1.0		0		0	0	214.2	1.3	10	
Vanadium	30.0	3.9		0		0	0	33.9		10	N
Zinc	106	2.5		0		0	0	100.6	5.5	10	

Associated samples:

Run ID :Run Order: **ICP2-HE_141229B: 56** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120241-053APDS** Method: **SW6010B**
Analysis Date: **12/29/14 13:32** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	12500	5.0	1355	11210		75	125				A
Barium	429	1.0	271	177.8	93	75	125				
Beryllium	131	1.0	135.5	0.5963	96	75	125				
Boron	263	1.0	271	2.245	96	75	125				
Copper	332	1.2	271	80.4	93	75	125				
Iron	17100	5.0	1355	16000		75	125				A
Manganese	1490	1.0	1355	214.2	94	75	125				
Vanadium	294	1.0	271	33.9	96	75	125				
Zinc	366	1.0	271	100.6	98	75	125				

Associated samples:

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141229B: 57** SampType: **Sample Matrix Spike** Lab ID: **H14120241-053AMS** Method: **SW6010B**

Analysis Date: **12/29/14 13:35** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13700	5.0	266	11210		75	125				A
Barium	234	1.0	53.19	177.8	106	75	125				
Beryllium	26.9	1.0	26.6	0.5963	99	75	125				
Boron	52.7	1.0	53.19	2.245	95	75	125				
Copper	132	1.2	53.19	80.4	97	75	125				
Iron	16700	5.0	266	16000		75	125				A
Manganese	483	1.0	266	214.2	101	75	125				
Vanadium	88.2	1.0	53.19	33.9	102	75	125				
Zinc	154	1.0	53.19	100.6	101	75	125				

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICP2-HE_141229B: 67** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120241-053AMSD** Method: **SW6010B**

Analysis Date: **12/29/14 14:13** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	13400	5.0	260.4	11210		75	125	13690	2.4	20	A
Barium	235	1.0	52.08	177.8	110	75	125	234.4	0.3	20	
Beryllium	25.5	1.0	26.04	0.5963	96	75	125	26.88	5.4	20	
Boron	51.8	1.0	52.08	2.245	95	75	125	52.74	1.7	20	
Copper	127	1.1	52.08	80.4	89	75	125	132	4.1	20	
Iron	15800	5.0	260.4	16000		75	125	16670	5.6	20	A
Manganese	453	1.0	260.4	214.2	92	75	125	483.5	6.6	20	
Vanadium	84.8	1.0	52.08	33.9	98	75	125	88.22	4.0	20	
Zinc	141	1.0	52.08	100.6	78	75	125	154.3	8.8	20	

Associated samples: **H14120110-007A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 23** SampType: **Method Blank** Lab ID: **MB-27491** Method: **SW6020**
Analysis Date: **12/29/14 12:38** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.1									
Arsenic	ND	0.3									
Cadmium	ND	0.2									
Chromium	ND	0.2									
Cobalt	ND	0.10									
Lead	ND	0.2									
Molybdenum	ND	0.2									
Nickel	ND	0.9									
Selenium	ND	0.4									
Silver	ND	0.3									
Uranium	ND	0.2									

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICPMS204-B_141229A: 24** SampType: **Laboratory Control Sample** Lab ID: **LCS-27491** Method: **SW6020**
Analysis Date: **12/29/14 12:42** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.2	1.0	126	0	**38**	2.2	92.9				
Arsenic	322	1.0	343	0	**94**	72.3	106.4				
Cadmium	121	1.0	137	0	**88**	73	105.1				
Chromium	80.6	1.0	76	0	**106**	72.8	109.1				
Cobalt	55.2	1.0	57.4	0	**96**	73.3	103.7				
Lead	194	1.0	187	0	**104**	75.9	108.6				
Molybdenum	170	1.0	172	0	**99**	68.6	105.8				
Nickel	62.9	1.0	61	0	**103**	72.3	103.4				
Selenium	206	1.0	196	0	**105**	72.5	112.2				
Silver	70.0	1.0	69	0	**101**	67.8	112.8				
Uranium	112	1.0	100	0	**112**	80	120				

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICPMS204-B_141229A: 25** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27491** Method: **SW6020**
Analysis Date: **12/29/14 12:47** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.7	1.0	50	0	**99**	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 25** SampType: **Laboratory Fortified Blank** Lab ID: **LFB-27491** Method: **SW6020**
Analysis Date: **12/29/14 12:47** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	50.0	1.0	50	0	100	80	120				
Cadmium	23.0	1.0	25	0	92	80	120				
Chromium	52.0	1.0	50	0	104	80	120				
Cobalt	47.6	1.0	50	0	95	80	120				
Lead	48.6	1.0	50	0	97	80	120				
Molybdenum	51.7	1.0	50	0	103	80	120				
Nickel	51.8	1.0	50	0	104	80	120				
Selenium	53.1	1.0	50	0	106	80	120				
Silver	25.2	1.0	25	0	101	80	120				
Uranium	47.1	1.0	50	0	94	80	120				

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICPMS204-B_141229A: 52** SampType: **Serial Dilution** Lab ID: **H14120241-053ADIL** Method: **SW6020**
Analysis Date: **12/29/14 14:49** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.0		0		0	0	0		10	
Arsenic	6.71	1.7		0		0	0	6.692		10	N
Cadmium	ND	1.0		0		0	0	0.2118		10	
Chromium	15.7	1.1		0		0	0	16.29	4.0	10	
Cobalt	3.68	1.0		0		0	0	4.116		10	N
Lead	8.42	1.2		0		0	0	8.826		10	N
Molybdenum	ND	1.0		0		0	0	0.3532		10	
Nickel	6.05	4.9		0		0	0	7.153		10	N
Selenium	ND	1.9		0		0	0	0		10	
Silver	ND	1.4		0		0	0	0		10	
Uranium	ND	1.0		0		0	0	0.8947		10	

Associated samples:

Run ID :Run Order: **ICPMS204-B_141229A: 53** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120241-053APDS** Method: **SW6020**
Analysis Date: **12/29/14 14:54** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	3060	1.0	2632	0	116	75	125				
Arsenic	3080	1.0	2632	6.692	117	75	125				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 53** SampType: **Post Digestion/Distillation Spike** Lab ID: **H14120241-053APDS** Method: **SW6020**

Analysis Date: **12/29/14 14:54** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	1140	1.0	1316	0.2118	87	75	125				
Chromium	3090	1.0	2632	16.29	117	75	125				
Cobalt	2330	1.0	2632	4.116	88	75	125				
Lead	2550	1.0	2632	8.826	96	75	125				
Molybdenum	3270	1.0	2632	0.3532	124	75	125				
Nickel	3030	1.0	2632	7.153	115	75	125				
Selenium	3570	1.0	2632	0	136	75	125				S
Silver	953	1.0	1316	0	72	75	125				S
Uranium	0.927	1.0	2632	0.8947	0	75	125				S

Associated samples:

Run ID :Run Order: **ICPMS204-B_141229A: 54** SampType: **Sample Matrix Spike** Lab ID: **H14120241-053AMS** Method: **SW6020**

Analysis Date: **12/29/14 14:58** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	24.8	1.0	53.19	0	47	75	125				S
Arsenic	58.9	1.0	53.19	6.692	98	75	125				
Cadmium	24.3	1.0	26.6	0.2118	91	75	125				
Chromium	72.1	1.0	53.19	16.29	105	75	125				
Cobalt	55.3	1.0	53.19	4.116	96	75	125				
Lead	60.8	1.0	53.19	8.826	98	75	125				
Molybdenum	56.2	1.0	53.19	0.3532	105	75	125				
Nickel	61.6	1.0	53.19	7.153	102	75	125				
Selenium	58.2	1.0	53.19	0	109	75	125				
Silver	33.5	1.0	26.6	0	126	75	125				S
Uranium	51.0	1.0	53.19	0.8947	94	75	125				

Associated samples: **H14120110-007A**

Run ID :Run Order: **ICPMS204-B_141229A: 55** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120241-053AMSD** Method: **SW6020**

Analysis Date: **12/29/14 15:02** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	20.9	1.0	52.08	0	40	75	125	24.79	17	20	S
Arsenic	58.6	1.0	52.08	6.692	100	75	125	58.88	0.4	20	
Cadmium	23.3	1.0	26.04	0.2118	89	75	125	24.28	4.1	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: 27491

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 55** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120241-053AMSD** Method: **SW6020**

Analysis Date: **12/29/14 15:02** Units: **mg/kg** **Prep Info:** Prep Date: **12/24/2014** Prep Method: **SW3050 B**

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	71.3	1.0	52.08	16.29	106	75	125	72.13	1.1	20	
Cobalt	52.9	1.0	52.08	4.116	94	75	125	55.29	4.5	20	
Lead	59.7	1.0	52.08	8.826	98	75	125	60.77	1.8	20	
Molybdenum	52.6	1.0	52.08	0.3532	100	75	125	56.2	6.7	20	
Nickel	61.6	1.0	52.08	7.153	104	75	125	61.6	0.1	20	
Selenium	56.3	1.0	52.08	0	108	75	125	58.22	3.4	20	
Silver	28.7	1.0	26.04	0	110	75	125	33.51	15	20	
Uranium	48.5	1.0	52.08	0.8947	91	75	125	50.96	4.9	20	

Associated samples: **H14120110-007A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102687

Date: *31-Dec-14*

Run ID :Run Order: **FIA203-HE_141208A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E353.2**
Analysis Date: **12/08/14 10:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.02	0.010	1	0	102	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208A: 9** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E353.2**
Analysis Date: **12/08/14 10:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.975	0.011	1	0	97	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208A: 11** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E353.2**
Analysis Date: **12/08/14 10:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.00363	0.010		0		0	0				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208A: 13** SampType: **Method Blank** Lab ID: **MBLK** Method: **E353.2**
Analysis Date: **12/08/14 10:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.007	0.001									

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208A: 86** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E353.2**
Analysis Date: **12/08/14 12:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	0.519	0.010	0.5	0	104	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208A: 88** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001DMS** Method: **E353.2**
Analysis Date: **12/08/14 12:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.01	0.011	1	0	101	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102687

Date: *31-Dec-14*

Run ID :Run Order: **FIA203-HE_141208A: 89** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001DMSD** Method: **E353.2**

Analysis Date: **12/08/14 12:29** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Nitrate+Nitrite as N	1.03	0.011	1	0	**103**	90	110	1.015	**1.6**	20	

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102699

Date: *31-Dec-14*

Run ID :Run Order: **FIA202-HE_141208A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**
Analysis Date: **12/08/14 13:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.248	0.010	0.25	0	99	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141208A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**
Analysis Date: **12/08/14 14:01** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-4.92E-05	0.010		0		0	0				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141208A: 70** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **12/08/14 15:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0974	0.010	0.1	0	97	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-005D**

Run ID :Run Order: **FIA202-HE_141208A: 89** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**
Analysis Date: **12/08/14 15:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0945	0.010	0.1	0	94	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102706

Date: *31-Dec-14*

Run ID :Run Order: **IC102-H_141208A: 13** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E300.0**
Analysis Date: **12/08/14 10:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100	0	102	90	110				
Sulfate	400	1.0	400	0	101	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **IC102-H_141208A: 14** SampType: **Method Blank** Lab ID: **ICB** Method: **E300.0**
Analysis Date: **12/08/14 11:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	0.09	0.008									
Sulfate	0.2	0.08									

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **IC102-H_141208A: 15** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E300.0**
Analysis Date: **12/08/14 11:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	47	1.0	50	0.093	94	90	110				
Sulfate	200	1.0	200	0.246	98	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **IC102-H_141208A: 73** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV120814-5** Method: **E300.0**
Analysis Date: **12/08/14 22:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100	0	103	90	110				
Sulfate	410	1.0	400	0	103	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **IC102-H_141208A: 87** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV120814-6** Method: **E300.0**
Analysis Date: **12/09/14 00:37** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	100	1.0	100	0	102	90	110				
Sulfate	410	1.0	400	0	102	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102706

Date: *31-Dec-14*

Run ID :Run Order: **IC102-H_141208A: 90** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004AMS** Method: **E300.0**

Analysis Date: **12/09/14 01:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	76	1.0	50	24.09	103	90	110				
Sulfate	240	1.0	200	28.76	104	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **IC102-H_141208A: 91** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004AMSD** Method: **E300.0**

Analysis Date: **12/09/14 01:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	77	1.0	50	24.09	106	90	110	75.77	1.4	20	
Sulfate	240	1.0	200	28.76	104	90	110	237	0.2	20	

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102707

Date: *31-Dec-14*

Run ID :Run Order: **FIA203-HE_141208C: 7** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E350.1**
Analysis Date: **12/08/14 15:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	14.6	0.50	15.2	0	96	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208C: 8** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E350.1**
Analysis Date: **12/08/14 15:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.910	0.055	1	0	91	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208C: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E350.1**
Analysis Date: **12/08/14 15:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	-0.0768	0.050		0		0	0				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208C: 65** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E350.1**
Analysis Date: **12/08/14 16:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	0.475	0.050	0.5	0	95	90	110				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208C: 68** SampType: **Sample Matrix Spike** Lab ID: **H14120109-016DMS** Method: **E350.1**
Analysis Date: **12/08/14 16:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.84	0.055	1	0.9561	89	80	120				

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Run ID :Run Order: **FIA203-HE_141208C: 69** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120109-016DMSD** Method: **E350.1**
Analysis Date: **12/08/14 16:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Ammonia as N	1.82	0.055	1	0.9561	87	80	120	1.842	1.0	10	

Associated samples: **H14120110-001D, H14120110-002D, H14120110-003D, H14120110-004D, H14120110-005D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102712

Date: *31-Dec-14*

Run ID :Run Order: **PHSC_101-H_141209A: 66** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **12/09/14 17:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	3	2									

Associated samples:

Run ID :Run Order: **PHSC_101-H_141209A: 68** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **12/09/14 17:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	620	4.0	600	2.8	103	90	110				

Associated samples:

Run ID :Run Order: **PHSC_101-H_141209A: 73** SampType: **Sample Duplicate** Lab ID: **H14120109-001ADUP** Method: **A2320 B**
Analysis Date: **12/09/14 18:35** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	100	4.0		0				101.5	0.8	10	
Bicarbonate as HCO3	120	4.0		0				123.2	0.8	10	

Associated samples:

Run ID :Run Order: **PHSC_101-H_141209A: 109** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001AMS** Method: **A2320 B**
Analysis Date: **12/09/14 20:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	610	4.0	600	2.12	101	80	120				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A**

Run ID :Run Order: **PHSC_101-H_141209A: 112** SampType: **Sample Duplicate** Lab ID: **H14120110-003ADUP** Method: **A2320 B**
Analysis Date: **12/09/14 20:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	95	4.0		0				94.3	0.5	10	
Bicarbonate as HCO3	120	4.0		0				114.4	0.5	10	

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102737

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141209B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/09/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.14	0.10	4	0	104	95	105				
Boron	0.774	0.10	0.8	0	97	95	105				
Calcium	39.4	1.0	40	0	98	95	105				
Iron	3.92	0.020	4	0	98	95	105				
Magnesium	39.6	1.0	40	0	99	95	105				
Manganese	3.97	0.010	4	0	99	95	105				
Potassium	38.6	1.0	40	0	97	95	105				
Sodium	38.7	1.0	40	0	97	95	105				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **12/09/14 10:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.59	0.10	2.5	0	103	95	105				
Boron	2.46	0.10	2.5	0	98	95	105				
Calcium	24.9	1.0	25	0	100	95	105				
Iron	2.46	0.020	2.5	0	98	95	105				
Magnesium	24.8	1.0	25	0	99	95	105				
Manganese	2.47	0.010	2.5	0	99	95	105				
Potassium	24.3	1.0	25	0	97	95	105				
Sodium	24.4	1.0	25	0	97	95	105				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/09/14 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	536	0.10	500	0	107	80	120				
Boron	0.00363	0.10		0		0	0				
Calcium	469	1.0	500	0	94	80	120				
Iron	184	0.020	200	0	92	80	120				
Magnesium	512	1.0	500	0	102	80	120				
Manganese	-0.00814	0.010		0		0	0				
Potassium	-0.140	1.0		0		0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102737

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141209B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **12/09/14 10:19** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	0.0106	1.0		0		0	0				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **12/09/14 10:23** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	538	0.10	500	0	108	80	120				
Boron	0.983	0.10	1	0	98	80	120				
Calcium	473	1.0	500	0	95	80	120				
Iron	184	0.020	200	0	92	80	120				
Magnesium	513	1.0	500	0	103	80	120				
Manganese	0.472	0.010	0.5	0	94	80	120				
Potassium	19.5	1.0	20	0	98	80	120				
Sodium	19.7	1.0	20	0	98	80	120				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 80** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **12/09/14 16:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.60	0.10	2.5	0	104	90	110				
Boron	2.44	0.10	2.5	0	98	90	110				
Calcium	24.3	1.0	25	0	97	90	110				
Iron	2.43	0.020	2.5	0	97	90	110				
Magnesium	24.1	1.0	25	0	96	90	110				
Manganese	2.41	0.010	2.5	0	96	90	110				
Potassium	24.3	1.0	25	0	97	90	110				
Sodium	24.5	1.0	25	0	98	90	110				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Run ID :Run Order: **ICP2-HE_141209B: 99** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**
Analysis Date: **12/09/14 17:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.47	0.10	2.5	0	99	90	110				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102737

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141209B: 99** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **12/09/14 17:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	2.48	0.10	2.5	0	99	90	110				
Calcium	24.3	1.0	25	0	97	90	110				
Iron	2.44	0.020	2.5	0	97	90	110				
Magnesium	23.9	1.0	25	0	96	90	110				
Manganese	2.43	0.010	2.5	0	97	90	110				
Potassium	24.5	1.0	25	0	98	90	110				
Sodium	24.7	1.0	25	0	99	90	110				

Associated samples: **H14120110-001C, H14120110-002C, H14120110-003C, H14120110-004C, H14120110-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **12/09/14 10:16** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0592	0.050	0.06	0	99	90	110				
Arsenic	0.0584	0.0050	0.06	0	97	90	110				
Barium	0.0589	0.10	0.06	0	98	90	110				
Beryllium	0.0303	0.0010	0.03	0	101	90	110				
Cadmium	0.0308	0.0010	0.03	0	103	90	110				
Chromium	0.0596	0.010	0.06	0	99	90	110				
Cobalt	0.0584	0.010	0.06	0	97	90	110				
Copper	0.0605	0.010	0.06	0	101	90	110				
Lead	0.0573	0.010	0.06	0	96	90	110				
Manganese	0.293	0.010	0.3	0	98	90	110				
Molybdenum	0.0590	0.0050	0.06	0	98	90	110				
Nickel	0.0599	0.010	0.06	0	100	90	110				
Potassium	2.95	0.50	3	0	98	90	110				
Selenium	0.0612	0.0050	0.06	0	102	90	110				
Silver	0.0284	0.0050	0.03	0	95	90	110				
Uranium	0.0581	0.0010	0.06	0	97	90	110				
Vanadium	0.0584	0.10	0.06	0	97	90	110				
Zinc	0.0611	0.010	0.06	0	102	90	110				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	6.40E-05	0.050		0							
Arsenic	0.000102	0.0050		0							
Barium	8.30E-05	0.10		0							
Beryllium	9.00E-06	0.0010		0							
Cadmium	0.000437	0.0010		0							
Chromium	0.00116	0.010		0							
Cobalt	0.000222	0.010		0							
Copper	0.000345	0.010		0							
Lead	0.000203	0.010		0							
Manganese	ND	0.010		0							

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 10:20** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.808	0.0050	0.8	0	101	70	130				
Nickel	0.000440	0.010		0							
Potassium	39.4	0.50	40	0	98	70	130				
Selenium	0.000172	0.0050		0							
Silver	0.000376	0.0050		0							
Uranium	7.00E-05	0.0010		0							
Vanadium	5.00E-05	0.10		0							
Zinc	0.000905	0.010		0							

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/09/14 10:25** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.000114	0.050		0		0	0				
Arsenic	0.0106	0.0050	0.01	0	106	70	130				
Barium	0.000373	0.10		0		0	0				
Beryllium	-1.00E-06	0.0010		0		0	0				
Cadmium	0.00968	0.0010	0.01	0	97	70	130				
Chromium	0.0215	0.010	0.02	0	108	70	130				
Cobalt	0.0200	0.010	0.02	0	100	70	130				
Copper	0.0210	0.010	0.02	0	105	70	130				
Lead	0.000217	0.010		0		0	0				
Manganese	0.0197	0.010	0.02	0	99	70	130				
Molybdenum	0.813	0.0050	0.8	0	102	70	130				
Nickel	0.0207	0.010	0.02	0	103	70	130				
Potassium	39.8	0.50	40	0	100	70	130				
Selenium	0.0100	0.0050	0.01	0	100	70	130				
Silver	0.0170	0.0050	0.02	0	85	70	130				
Uranium	2.20E-05	0.0010		0		0	0				
Vanadium	0.0210	0.10	0.02	0	105	70	130				
Zinc	0.0112	0.010	0.01	0	112	70	130				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 23** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**

Analysis Date: **12/09/14 16:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1E-05									
Arsenic	ND	3E-05									
Barium	0.0001	3E-05									
Beryllium	ND	2E-05									
Cadmium	ND	6E-06									
Chromium	ND	3E-05									
Cobalt	ND	2E-05									
Copper	6E-05	3E-05									
Lead	ND	8E-06									
Manganese	ND	2E-05									
Molybdenum	ND	3E-05									
Nickel	ND	6E-05									
Potassium	ND	0.05									
Selenium	ND	7E-05									
Silver	ND	3E-05									
Uranium	ND	6E-06									
Vanadium	ND	3E-05									
Zinc	0.0003	0.0003									

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICPMS204-B_141209B: 24** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **12/09/14 16:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0469	0.050	0.05	0	**94**	85	115				
Arsenic	0.0498	0.0050	0.05	0	**100**	85	115				
Barium	0.0488	0.10	0.05	0.0001164	**97**	85	115				
Beryllium	0.0497	0.0010	0.05	0	**99**	85	115				
Cadmium	0.0502	0.0010	0.05	0	**100**	85	115				
Chromium	0.0507	0.010	0.05	0	**101**	85	115				
Cobalt	0.0474	0.010	0.05	0	**95**	85	115				
Copper	0.0512	0.010	0.05	0.0000607	**102**	85	115				
Lead	0.0474	0.010	0.05	0	**95**	85	115				
Manganese	0.0475	0.010	0.05	0	**95**	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 24** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**

Analysis Date: **12/09/14 16:18** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.0479	0.0050	0.05	0	96	85	115				
Nickel	0.0505	0.010	0.05	0	101	85	115				
Potassium	0.979	0.50	1	0	98	85	115				
Selenium	0.0514	0.0050	0.05	0	103	85	115				
Silver	0.0191	0.0050	0.02	0	95	85	115				
Uranium	0.0473	0.0010	0.05	0	95	85	115				
Vanadium	0.0497	0.10	0.05	0	99	85	115				
Zinc	0.0532	0.010	0.05	0.0003189	106	85	115				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICPMS204-B_141209B: 117** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/09/14 23:24** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	8.40E-05	0.050		0							
Arsenic	0.000155	0.0050		0							
Barium	0.000143	0.10		0							
Beryllium	3.60E-05	0.0010		0							
Cadmium	0.000451	0.0010		0							
Chromium	0.00113	0.010		0							
Cobalt	0.000233	0.010		0							
Copper	0.000365	0.010		0							
Lead	0.000239	0.010		0							
Manganese	-1.40E-05	0.010		0							
Molybdenum	0.841	0.0050	0.8	0	105	70	130				
Nickel	0.000445	0.010		0							
Potassium	42.6	0.50	40	0	106	70	130				
Selenium	0.000557	0.0050		0							
Silver	0.000282	0.0050		0							
Uranium	0.000298	0.0010		0							
Vanadium	0.000124	0.10		0							
Zinc	0.000999	0.010		0							

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 118** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/09/14 23:28** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	8.70E-05	0.050		0		0	0				
Arsenic	0.0102	0.0050	0.01	0	102	70	130				
Barium	0.000387	0.10		0		0	0				
Beryllium	1.80E-05	0.0010		0		0	0				
Cadmium	0.00928	0.0010	0.01	0	93	70	130				
Chromium	0.0217	0.010	0.02	0	108	70	130				
Cobalt	0.0192	0.010	0.02	0	96	70	130				
Copper	0.0206	0.010	0.02	0	103	70	130				
Lead	0.000224	0.010		0		0	0				
Manganese	0.0189	0.010	0.02	0	95	70	130				
Molybdenum	0.817	0.0050	0.8	0	102	70	130				
Nickel	0.0204	0.010	0.02	0	102	70	130				
Potassium	41.3	0.50	40	0	103	70	130				
Selenium	0.0102	0.0050	0.01	0	102	70	130				
Silver	0.0166	0.0050	0.02	0	83	70	130				
Uranium	8.60E-05	0.0010		0		0	0				
Vanadium	0.0208	0.10	0.02	0	104	70	130				
Zinc	0.0107	0.010	0.01	0	107	70	130				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 245** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004BMS** Method: **E200.8**

Analysis Date: **12/10/14 09:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0454	0.0010	0.05	0.0001712	90	70	130				
Arsenic	0.0521	0.0010	0.05	0.002569	99	70	130				
Barium	0.0969	0.050	0.05	0.0497	94	70	130				
Beryllium	0.0489	0.0010	0.05	0	98	70	130				
Cadmium	0.0465	0.0010	0.05	0.000023	93	70	130				
Chromium	0.0496	0.0050	0.05	0.0000369	99	70	130				
Cobalt	0.0454	0.0050	0.05	0.000106	91	70	130				
Copper	0.0504	0.0050	0.05	0.001597	98	70	130				
Lead	0.0458	0.0010	0.05	0.000054	92	70	130				
Manganese	0.172	0.0010	0.05	0.1276	89	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 245** SampType: **Sample Matrix Spike** Lab ID: **H14120110-004BMS** Method: **E200.8**

Analysis Date: **12/10/14 09:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.0523	0.0010	0.05	0.005549	93	70	130				
Nickel	0.0486	0.0050	0.05	0	97	70	130				
Potassium	4.47	1.0	1	3.305	117	70	130				
Selenium	0.0536	0.0010	0.05	0.0001556	107	70	130				
Silver	0.0162	0.0010	0.02	0	81	70	130				
Uranium	0.0513	0.00030	0.05	0.003716	95	70	130				
Vanadium	0.0515	0.010	0.05	0.002249	98	70	130				
Zinc	0.0698	0.010	0.05	0.01857	102	70	130				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICPMS204-B_141209B: 246** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-004BMSD** Method: **E200.8**

Analysis Date: **12/10/14 09:17** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0454	0.0010	0.05	0.0001712	90	70	130	0.04535	0.1	20	
Arsenic	0.0521	0.0010	0.05	0.002569	99	70	130	0.05211	0.1	20	
Barium	0.0957	0.050	0.05	0.0497	92	70	130	0.09692	1.2	20	
Beryllium	0.0488	0.0010	0.05	0	98	70	130	0.04889	0.2	20	
Cadmium	0.0469	0.0010	0.05	0.000023	94	70	130	0.04653	0.8	20	
Chromium	0.0493	0.0050	0.05	0.0000369	98	70	130	0.04962	0.7	20	
Cobalt	0.0459	0.0050	0.05	0.000106	92	70	130	0.0454	1.0	20	
Copper	0.0506	0.0050	0.05	0.001597	98	70	130	0.05042	0.4	20	
Lead	0.0460	0.0010	0.05	0.000054	92	70	130	0.04583	0.5	20	
Manganese	0.175	0.0010	0.05	0.1276	94	70	130	0.1719	1.6	20	
Molybdenum	0.0522	0.0010	0.05	0.005549	93	70	130	0.05226	0.2	20	
Nickel	0.0486	0.0050	0.05	0	97	70	130	0.04857	0.1	20	
Potassium	4.54	1.0	1	3.305	123	70	130	4.473	1.4	20	
Selenium	0.0533	0.0010	0.05	0.0001556	106	70	130	0.05364	0.6	20	
Silver	0.0164	0.0010	0.02	0	82	70	130	0.01621	1.0	20	
Uranium	0.0523	0.00030	0.05	0.003716	97	70	130	0.05128	2.0	20	
Vanadium	0.0512	0.010	0.05	0.002249	98	70	130	0.05148	0.5	20	
Zinc	0.0685	0.010	0.05	0.01857	100	70	130	0.06979	1.9	20	

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 255** SampType: **Sample Matrix Spike** Lab ID: **H14120105-001BMS** Method: **E200.8**

Analysis Date: **12/10/14 10:03** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.224	0.0010	0.25	0.0009095	89	70	130				
Arsenic	0.252	0.0010	0.25	0	101	70	130				
Barium	0.246	0.050	0.25	0.01618	92	70	130				
Beryllium	0.224	0.0010	0.25	0	90	70	130				
Cadmium	0.210	0.0010	0.25	0.000051	84	70	130				
Chromium	0.241	0.0050	0.25	0.0004265	96	70	130				
Cobalt	0.221	0.0050	0.25	0	88	70	130				
Copper	0.229	0.0050	0.25	0.001014	91	70	130				
Lead	0.236	0.0010	0.25	0.000153	94	70	130				
Manganese	0.241	0.0010	0.25	0.01729	89	70	130				
Molybdenum	0.238	0.0010	0.25	0	95	70	130				
Nickel	0.231	0.0050	0.25	0	92	70	130				
Potassium	13.9	1.0	5	9.27	93	70	130				
Selenium	0.262	0.0010	0.25	0.01602	99	70	130				
Silver	0.0669	0.0010	0.1	0	67	70	130				S
Uranium	0.236	0.00030	0.25	0.0003315	94	70	130				
Vanadium	0.246	0.010	0.25	0.0008595	98	70	130				
Zinc	0.233	0.010	0.25	0.004408	91	70	130				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICPMS204-B_141209B: 256** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120105-001BMSD** Method: **E200.8**

Analysis Date: **12/10/14 10:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.231	0.0010	0.25	0.0009095	92	70	130	0.2245	3.0	20	
Arsenic	0.256	0.0010	0.25	0	102	70	130	0.2516	1.7	20	
Barium	0.250	0.050	0.25	0.01618	93	70	130	0.2455	1.7	20	
Beryllium	0.227	0.0010	0.25	0	91	70	130	0.2243	1.1	20	
Cadmium	0.214	0.0010	0.25	0.000051	85	70	130	0.2095	2.0	20	
Chromium	0.243	0.0050	0.25	0.0004265	97	70	130	0.2414	0.7	20	
Cobalt	0.226	0.0050	0.25	0	91	70	130	0.2211	2.3	20	
Copper	0.232	0.0050	0.25	0.001014	92	70	130	0.229	1.1	20	
Lead	0.235	0.0010	0.25	0.000153	94	70	130	0.2363	0.4	20	
Manganese	0.242	0.0010	0.25	0.01729	90	70	130	0.241	0.4	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 256** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120105-001BMSD** Method: **E200.8**

Analysis Date: **12/10/14 10:08** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.241	0.0010	0.25	0	97	70	130	0.2376	1.6	20	
Nickel	0.234	0.0050	0.25	0	94	70	130	0.2311	1.4	20	
Potassium	14.1	1.0	5	9.27	97	70	130	13.94	1.3	20	
Selenium	0.265	0.0010	0.25	0.01602	100	70	130	0.2624	1.2	20	
Silver	0.0746	0.0010	0.1	0	75	70	130	0.0669	11	20	
Uranium	0.236	0.00030	0.25	0.0003315	94	70	130	0.2362	0.0	20	
Vanadium	0.253	0.010	0.25	0.0008595	101	70	130	0.2465	2.5	20	
Zinc	0.237	0.010	0.25	0.004408	93	70	130	0.2326	2.0	20	

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICPMS204-B_141209B: 277** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **12/10/14 11:53** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0602	0.050	0.06	0	100	90	110				
Arsenic	0.0593	0.0050	0.06	0	99	90	110				
Barium	0.0594	0.10	0.06	0	99	90	110				
Beryllium	0.0305	0.0010	0.03	0	102	90	110				
Cadmium	0.0316	0.0010	0.03	0	105	90	110				
Chromium	0.0596	0.010	0.06	0	99	90	110				
Cobalt	0.0575	0.010	0.06	0	96	90	110				
Copper	0.0614	0.010	0.06	0	102	90	110				
Lead	0.0597	0.010	0.06	0	100	90	110				
Manganese	0.298	0.010	0.3	0	99	90	110				
Molybdenum	0.0601	0.0050	0.06	0	100	90	110				
Nickel	0.0607	0.010	0.06	0	101	90	110				
Potassium	2.96	0.50	3	0	99	90	110				
Selenium	0.0596	0.0050	0.06	0	99	90	110				
Silver	0.0303	0.0050	0.03	0	101	90	110				
Uranium	0.0606	0.0010	0.06	0	101	90	110				
Vanadium	0.0590	0.10	0.06	0	98	90	110				
Zinc	0.0607	0.010	0.06	0	101	90	110				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 278** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/10/14 11:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	9.90E-05	0.050		0							
Arsenic	0.000117	0.0050		0							
Barium	0.000136	0.10		0							
Beryllium	3.10E-05	0.0010		0							
Cadmium	0.000495	0.0010		0							
Chromium	0.00111	0.010		0							
Cobalt	0.000274	0.010		0							
Copper	0.000342	0.010		0							
Lead	0.000224	0.010		0							
Manganese	-0.000435	0.010		0							
Molybdenum	0.839	0.0050	0.8	0	105	70	130				
Nickel	0.000593	0.010		0							
Potassium	39.7	0.50	40	0	99	70	130				
Selenium	0.000146	0.0050		0							
Silver	0.000791	0.0050		0							
Uranium	8.10E-05	0.0010		0							
Vanadium	6.80E-05	0.10		0							
Zinc	0.000889	0.010		0							

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Run ID :Run Order: **ICPMS204-B_141209B: 279** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/10/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.000160	0.050		0		0	0				
Arsenic	0.0104	0.0050	0.01	0	104	70	130				
Barium	0.000385	0.10		0		0	0				
Beryllium	1.80E-05	0.0010		0		0	0				
Cadmium	0.00966	0.0010	0.01	0	97	70	130				
Chromium	0.0216	0.010	0.02	0	108	70	130				
Cobalt	0.0194	0.010	0.02	0	97	70	130				
Copper	0.0208	0.010	0.02	0	104	70	130				
Lead	0.000226	0.010		0		0	0				
Manganese	0.0189	0.010	0.02	0	95	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102739

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141209B: 279** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/10/14 12:02** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 18	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	0.835	0.0050	0.8	0	104	70	130				
Nickel	0.0209	0.010	0.02	0	104	70	130				
Potassium	39.4	0.50	40	0	99	70	130				
Selenium	0.00985	0.0050	0.01	0	99	70	130				
Silver	0.0176	0.0050	0.02	0	88	70	130				
Uranium	2.80E-05	0.0010		0		0	0				
Vanadium	0.0208	0.10	0.02	0	104	70	130				
Zinc	0.0112	0.010	0.01	0	112	70	130				

Associated samples: **H14120110-001B, H14120110-001C, H14120110-002B, H14120110-002C, H14120110-003B, H14120110-003C, H14120110-004B, H14120110-004C, H14120110-005B, H14120110-005C**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102740

Date: *31-Dec-14*

Run ID :Run Order: **PHSC_101-H_141210A: 25** SampType: **Method Blank** Lab ID: **MB** Method: **A2320 B**
Analysis Date: **12/10/14 11:27** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	ND	2									

Associated samples: **H14120110-004A, H14120110-005A**

Run ID :Run Order: **PHSC_101-H_141210A: 27** SampType: **Laboratory Control Sample** Lab ID: **LCS** Method: **A2320 B**
Analysis Date: **12/10/14 11:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	610	4.0	600	0	**101**	90	110				

Associated samples: **H14120110-004A, H14120110-005A**

Run ID :Run Order: **PHSC_101-H_141210A: 30** SampType: **Sample Duplicate** Lab ID: **H14120110-004ADUP** Method: **A2320 B**
Analysis Date: **12/10/14 11:52** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 2	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	100	4.0		0				106.2	**1.3**	10	
Bicarbonate as HCO3	130	4.0		0				129	**1.3**	10	

Associated samples: **H14120110-004A, H14120110-005A**

Run ID :Run Order: **PHSC_101-H_141210A: 34** SampType: **Sample Matrix Spike** Lab ID: **H14120110-005AMS** Method: **A2320 B**
Analysis Date: **12/10/14 12:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total as CaCO3	680	4.0	600	101.8	**96**	80	120				

Associated samples: **H14120110-004A, H14120110-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102752

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141210A: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/10/14 08:56** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.95	0.10	4	0	99	95	105				
Boron	0.786	0.10	0.8	0	98	95	105				
Calcium	38.9	1.0	40	0	97	95	105				
Iron	3.91	0.020	4	0	98	95	105				
Magnesium	38.7	1.0	40	0	97	95	105				
Manganese	3.95	0.010	4	0	99	95	105				
Potassium	38.9	1.0	40	0	97	95	105				
Sodium	39.0	1.0	40	0	98	95	105				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 7** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV-1** Method: **E200.7**

Analysis Date: **12/10/14 08:59** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.52	0.10	2.5	0	101	95	105				
Boron	2.49	0.10	2.5	0	99	95	105				
Calcium	24.9	1.0	25	0	100	95	105				
Iron	2.49	0.020	2.5	0	99	95	105				
Magnesium	24.6	1.0	25	0	98	95	105				
Manganese	2.51	0.010	2.5	0	100	95	105				
Potassium	24.8	1.0	25	0	99	95	105				
Sodium	24.9	1.0	25	0	99	95	105				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/10/14 09:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	523	0.10	500	0	105	80	120				
Boron	0.00511	0.10		0		0	0				
Calcium	471	1.0	500	0	94	80	120				
Iron	185	0.020	200	0	92	80	120				
Magnesium	505	1.0	500	0	101	80	120				
Manganese	-0.00917	0.010		0		0	0				
Potassium	-0.194	1.0		0		0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102752

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141210A: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**
Analysis Date: **12/10/14 09:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	0.0297	1.0		0		0	0				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**
Analysis Date: **12/10/14 09:15** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	525	0.10	500	0	105	80	120				
Boron	1.00	0.10	1	0	100	80	120				
Calcium	474	1.0	500	0	95	80	120				
Iron	185	0.020	200	0	93	80	120				
Magnesium	505	1.0	500	0	101	80	120				
Manganese	0.476	0.010	0.5	0	95	80	120				
Potassium	19.8	1.0	20	0	99	80	120				
Sodium	20.0	1.0	20	0	100	80	120				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 13** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.7**
Analysis Date: **12/10/14 09:22** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.002									
Boron	ND	0.002									
Calcium	0.04	0.03									
Iron	0.005	0.003									
Magnesium	ND	0.04									
Manganese	ND	0.0004									
Potassium	ND	0.04									
Sodium	ND	0.02									

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**
Analysis Date: **12/10/14 09:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.84	0.10	5	0	97	85	115				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102752

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141210A: 14** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.7**
Analysis Date: **12/10/14 09:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.940	0.10	1	0	94	85	115				
Calcium	47.7	1.0	50	0.04144	95	85	115				
Iron	4.79	0.020	5	0.00546	96	85	115				
Magnesium	47.3	1.0	50	0	95	85	115				
Manganese	4.86	0.010	5	0	97	85	115				
Potassium	48.7	1.0	50	0	97	85	115				
Sodium	48.7	1.0	50	0	97	85	115				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 17** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001BMS2** Method: **E200.7**
Analysis Date: **12/10/14 09:38** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.01	0.030	5	0.00293	100	70	130				
Boron	0.976	0.050	1	0	98	70	130				
Calcium	49.4	1.0	50	0.06146	99	70	130				
Iron	4.90	0.020	5	0	98	70	130				
Magnesium	49.3	1.0	50	0	99	70	130				
Manganese	5.04	0.0010	5	0	101	70	130				
Potassium	49.9	1.0	50	0	100	70	130				
Sodium	50.1	1.0	50	0	100	70	130				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 18** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001BMSD2** Method: **E200.7**
Analysis Date: **12/10/14 09:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	5.15	0.030	5	0.00293	103	70	130	5.005	2.8	20	
Boron	1.03	0.050	1	0	103	70	130	0.9762	5.5	20	
Calcium	50.9	1.0	50	0.06146	102	70	130	49.39	3.0	20	
Iron	5.07	0.020	5	0	101	70	130	4.901	3.4	20	
Magnesium	51.2	1.0	50	0	102	70	130	49.34	3.6	20	
Manganese	5.20	0.0010	5	0	104	70	130	5.043	3.1	20	
Potassium	50.2	1.0	50	0	100	70	130	49.91	0.6	20	
Sodium	50.4	1.0	50	0	101	70	130	50.07	0.7	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102752

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141210A: 18** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001BMSD2** Method: **E200.7**

Analysis Date: **12/10/14 09:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Run ID :Run Order: **ICP2-HE_141210A: 19** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E200.7**

Analysis Date: **12/10/14 09:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 8	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	2.52	0.10	2.5	0	101	90	110				
Boron	2.49	0.10	2.5	0	100	90	110				
Calcium	24.8	1.0	25	0	99	90	110				
Iron	2.49	0.020	2.5	0	100	90	110				
Magnesium	24.6	1.0	25	0	98	90	110				
Manganese	2.51	0.010	2.5	0	100	90	110				
Potassium	24.6	1.0	25	0	98	90	110				
Sodium	24.8	1.0	25	0	99	90	110				

Associated samples: **H14120110-001B, H14120110-002B, H14120110-003B, H14120110-004B, H14120110-005B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102843

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141212B: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **12/12/14 09:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0610	0.010	0.06	0	102	90	110				

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 11** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **12/12/14 09:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.000996	0.010		0							

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 12** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **12/12/14 09:43** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0111	0.010	0.01	0	111	70	130				

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 61** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**
Analysis Date: **12/13/14 00:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0607	0.010	0.06	0	101	90	110				

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 62** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**
Analysis Date: **12/13/14 00:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.00104	0.010		0							

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 63** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**
Analysis Date: **12/13/14 00:55** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0113	0.010	0.01	0	113	70	130				

Associated samples: **H14120110-001B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102843

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141212B: 73** SampType: **Method Blank** Lab ID: **ICB** Method: **E200.8**
Analysis Date: **12/13/14 02:09** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0005	0.0003									

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 74** SampType: **Laboratory Fortified Blank** Lab ID: **LFB** Method: **E200.8**
Analysis Date: **12/13/14 02:14** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0521	0.010	0.05	0.0005108	103	85	115				

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 80** SampType: **Sample Matrix Spike** Lab ID: **H14120110-001BMS** Method: **E200.8**
Analysis Date: **12/13/14 02:42** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0603	0.010	0.05	0.00915	102	70	130				

Associated samples: **H14120110-001B**

Run ID :Run Order: **ICPMS204-B_141212B: 81** SampType: **Sample Matrix Spike Duplicate** Lab ID: **H14120110-001BMSD** Method: **E200.8**
Analysis Date: **12/13/14 02:47** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0623	0.010	0.05	0.00915	106	70	130	0.06032	3.2	20	

Associated samples: **H14120110-001B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102892

Date: *31-Dec-14*

Run ID :Run Order: **FIA202-HE_141216A: 8** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E365.1**

Analysis Date: **12/16/14 09:11** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.256	0.010	0.25	0	102	90	110				

Associated samples: **H14120110-004D**

Run ID :Run Order: **FIA202-HE_141216A: 9** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **E365.1**

Analysis Date: **12/16/14 09:12** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	0.0962	0.010	0.1	0	96	90	110				

Associated samples: **H14120110-004D**

Run ID :Run Order: **FIA202-HE_141216A: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **E365.1**

Analysis Date: **12/16/14 09:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total as P	-1.79E-05	0.010		0		0	0				

Associated samples: **H14120110-004D**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R102932

Date: *31-Dec-14*

Run ID :Run Order: **FIA203-HE_141217B: 10** SampType: **Initial Calibration Blank, Instrument Blank** Lab ID: **ICB** Method: **A4500 N-C**

Analysis Date: **12/17/14 14:39** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.0847	0.10		0		0	0				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **FIA203-HE_141217B: 26** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **12/17/14 14:58** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.501	0.10	0.5	0	**100**	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **FIA203-HE_141217B: 39** SampType: **Continuing Calibration Verification Standar** Lab ID: **CCV** Method: **A4500 N-C**

Analysis Date: **12/17/14 15:13** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Total	0.481	0.10	0.5	0	**96**	90	110				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103084

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141223B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/23/14 10:21** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	4.12	0.10	4	0	103	90	110				
Barium	0.806	0.10	0.8	0	101	90	110				
Beryllium	0.411	0.0010	0.4	0	103	90	110				
Boron	0.812	0.10	0.8	0	102	90	110				
Copper	0.814	0.010	0.8	0	102	90	110				
Iron	4.06	0.020	4	0	102	90	110				
Manganese	4.09	0.010	4	0	102	90	110				
Vanadium	0.830	0.10	0.8	0	104	90	110				
Zinc	0.824	0.010	0.8	0	103	90	110				

Associated samples: **H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/23/14 10:36** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	533	0.10	500	0	107	80	120				
Barium	0.000280	0.10		0		0	0				
Beryllium	6.00E-05	0.0010		0		0	0				
Boron	0.00721	0.10		0		0	0				
Copper	3.00E-05	0.010		0		0	0				
Iron	185	0.020	200	0	93	80	120				
Manganese	-0.00615	0.010		0		0	0				
Vanadium	0.00352	0.10		0		0	0				
Zinc	0.00333	0.010		0		0	0				

Associated samples: **H14120110-010A, H14120110-010B**

Run ID :Run Order: **ICP2-HE_141223B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/23/14 10:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	535	0.10	500	0	107	80	120				
Barium	0.512	0.10	0.5	0	102	80	120				
Beryllium	0.493	0.0010	0.5	0	99	80	120				
Boron	1.01	0.10	1	0	101	80	120				
Copper	0.520	0.010	0.5	0	104	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103084

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141223B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/23/14 10:40** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	185	0.020	200	0	92	80	120				
Manganese	0.479	0.010	0.5	0	96	80	120				
Vanadium	0.484	0.10	0.5	0	97	80	120				
Zinc	0.990	0.010	1	0	99	80	120				

Associated samples: **H14120110-010A, H14120110-010B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103113

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/24/14 09:45** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.99	0.10	4	0	100	90	110				
Barium	0.784	0.10	0.8	0	98	90	110				
Beryllium	0.402	0.0010	0.4	0	100	90	110				
Boron	0.791	0.10	0.8	0	99	90	110				
Copper	0.785	0.010	0.8	0	98	90	110				
Iron	3.84	0.020	4	0	96	90	110				
Manganese	3.91	0.010	4	0	98	90	110				
Nickel	0.788	0.010	0.8	0	98	90	110				
Vanadium	0.802	0.10	0.8	0	100	90	110				
Zinc	0.792	0.010	0.8	0	99	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/24/14 10:00** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	521	0.10	500	0	104	80	120				
Barium	4.00E-05	0.10		0		0	0				
Beryllium	ND	0.0010		0		0	0				
Boron	0.00756	0.10		0		0	0				
Copper	0.00150	0.010		0		0	0				
Iron	177	0.020	200	0	89	80	120				
Manganese	-0.0165	0.010		0		0	0				
Nickel	0.00628	0.010		0		0	0				
Vanadium	0.000710	0.10		0		0	0				
Zinc	0.00117	0.010		0		0	0				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICP2-HE_141224B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/24/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	520	0.10	500	0	104	80	120				
Barium	0.492	0.10	0.5	0	98	80	120				
Beryllium	0.490	0.0010	0.5	0	98	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limit; N - Analyte concentration was not sufficiently high to calculate RPD
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits; A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103113

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141224B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/24/14 10:04** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 10	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Boron	0.977	0.10	1	0	98	80	120				
Copper	0.498	0.010	0.5	0	100	80	120				
Iron	175	0.020	200	0	88	80	120				
Manganese	0.447	0.010	0.5	0	89	80	120				
Nickel	0.894	0.010	1	0	89	80	120				
Vanadium	0.478	0.10	0.5	0	96	80	120				
Zinc	0.958	0.010	1	0	96	80	120				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-011A, H14120110-011B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103125

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141224B: 9** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **12/24/14 17:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 12	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0574	0.0010	0.06	0	96	90	110				
Arsenic	0.0588	0.0010	0.06	0	98	90	110				
Boron	0.0582	0.0010	0.06	0	97	90	110				
Cadmium	0.0310	0.0010	0.03	0	103	90	110				
Chromium	0.0570	0.0010	0.06	0	95	90	110				
Cobalt	0.0588	0.0010	0.06	0	98	90	110				
Lead	0.0569	0.0010	0.06	0	95	90	110				
Molybdenum	0.0562	0.0010	0.06	0	94	90	110				
Nickel	0.0580	0.0010	0.06	0	97	90	110				
Selenium	0.0607	0.0010	0.06	0	101	90	110				
Silver	0.0288	0.0010	0.03	0	96	90	110				
Uranium	0.0588	0.00030	0.06	0	98	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Run ID :Run Order: **ICPMS204-B_141224B: 94** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **12/24/14 23:54** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 12	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0587	0.0010	0.06	0	98	90	110				
Arsenic	0.0593	0.0010	0.06	0	99	90	110				
Boron	0.0597	0.0010	0.06	0	100	90	110				
Cadmium	0.0314	0.0010	0.03	0	105	90	110				
Chromium	0.0586	0.0010	0.06	0	98	90	110				
Cobalt	0.0600	0.0010	0.06	0	100	90	110				
Lead	0.0574	0.0010	0.06	0	96	90	110				
Molybdenum	0.0572	0.0010	0.06	0	95	90	110				
Nickel	0.0595	0.0010	0.06	0	99	90	110				
Selenium	0.0594	0.0010	0.06	0	99	90	110				
Silver	0.0297	0.0010	0.03	0	99	90	110				
Uranium	0.0590	0.00030	0.06	0	98	90	110				

Associated samples: **H14120110-006A, H14120110-006B, H14120110-008A, H14120110-008B, H14120110-009A, H14120110-009B, H14120110-010A, H14120110-010B, H14120110-011A, H14120110-011B**

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103141

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141229B: 6** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV** Method: **E200.7**

Analysis Date: **12/29/14 09:51** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	3.99	0.10	4	0	100	90	110				
Barium	0.783	0.10	0.8	0	98	90	110				
Beryllium	0.412	0.0010	0.4	0	103	90	110				
Boron	0.809	0.10	0.8	0	101	90	110				
Copper	0.782	0.010	0.8	0	98	90	110				
Iron	4.03	0.020	4	0	101	90	110				
Manganese	4.03	0.010	4	0	101	90	110				
Vanadium	0.823	0.10	0.8	0	103	90	110				
Zinc	0.822	0.010	0.8	0	103	90	110				

Associated samples: **H14120110-007A, H14120110-007B**

Run ID :Run Order: **ICP2-HE_141229B: 10** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.7**

Analysis Date: **12/29/14 10:06** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	516	0.10	500	0	103	80	120				
Barium	0.000300	0.10		0		0	0				
Beryllium	3.00E-05	0.0010		0		0	0				
Boron	-0.00137	0.10		0		0	0				
Copper	0.000500	0.010		0		0	0				
Iron	189	0.020	200	0	94	80	120				
Manganese	-0.00169	0.010		0		0	0				
Vanadium	0.000140	0.10		0		0	0				
Zinc	-0.00328	0.010		0		0	0				

Associated samples: **H14120110-007A, H14120110-007B**

Run ID :Run Order: **ICP2-HE_141229B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/29/14 10:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	521	0.10	500	0	104	80	120				
Barium	0.495	0.10	0.5	0	99	80	120				
Beryllium	0.508	0.0010	0.5	0	102	80	120				
Boron	0.988	0.10	1	0	99	80	120				
Copper	0.504	0.010	0.5	0	101	80	120				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103141

Date: *31-Dec-14*

Run ID :Run Order: **ICP2-HE_141229B: 11** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.7**

Analysis Date: **12/29/14 10:10** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 9	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron	191	0.020	200	0	95	80	120				
Manganese	0.490	0.010	0.5	0	98	80	120				
Vanadium	0.494	0.10	0.5	0	99	80	120				
Zinc	1.00	0.010	1	0	100	80	120				

Associated samples: **H14120110-007A, H14120110-007B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103150

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 197** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **E200.8**

Analysis Date: **12/30/14 01:41** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0598	0.050	0.06	0	100	90	110				
Arsenic	0.0606	0.0050	0.06	0	101	90	110				
Cadmium	0.0310	0.0010	0.03	0	103	90	110				
Chromium	0.0614	0.010	0.06	0	102	90	110				
Cobalt	0.0593	0.010	0.06	0	99	90	110				
Lead	0.0587	0.010	0.06	0	98	90	110				
Molybdenum	0.0585	0.0050	0.06	0	97	90	110				
Nickel	0.0619	0.010	0.06	0	103	90	110				
Selenium	0.0613	0.0050	0.06	0	102	90	110				
Silver	0.0299	0.0050	0.03	0	100	90	110				
Uranium	0.0588	0.0010	0.06	0	98	90	110				

Associated samples: **H14120110-007A, H14120110-007B**

Run ID :Run Order: **ICPMS204-B_141229A: 198** SampType: **Interference Check Sample A** Lab ID: **ICSA** Method: **E200.8**

Analysis Date: **12/30/14 01:46** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	8.00E-05	0.050		0							
Arsenic	4.70E-05	0.0050		0							
Cadmium	0.000431	0.0010		0							
Chromium	0.00105	0.010		0							
Cobalt	0.000186	0.010		0							
Lead	0.000213	0.010		0							
Molybdenum	0.840	0.0050	0.8	0	105	70	130				
Nickel	0.000508	0.010		0							
Selenium	0.000171	0.0050		0							
Silver	7.40E-05	0.0050		0							
Uranium	5.90E-05	0.0010		0							

Associated samples: **H14120110-007A, H14120110-007B**

Run ID :Run Order: **ICPMS204-B_141229A: 199** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/30/14 01:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.000104	0.050		0		0	0				

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103150

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 199** SampType: **Interference Check Sample AB** Lab ID: **ICSAB** Method: **E200.8**

Analysis Date: **12/30/14 01:50** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0106	0.0050	0.01	0	**106**	70	130				
Cadmium	0.00950	0.0010	0.01	0	**95**	70	130				
Chromium	0.0220	0.010	0.02	0	**110**	70	130				
Cobalt	0.0197	0.010	0.02	0	**99**	70	130				
Lead	0.000202	0.010		0		0	0				
Molybdenum	0.812	0.0050	0.8	0	**102**	70	130				
Nickel	0.0209	0.010	0.02	0	**104**	70	130				
Selenium	0.0108	0.0050	0.01	0	**108**	70	130				
Silver	0.0173	0.0050	0.02	0	**87**	70	130				
Uranium	1.70E-05	0.0010		0		0	0				

Associated samples: **H14120110-007A, H14120110-007B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: R103150

Date: *31-Dec-14*

Run ID :Run Order: **ICPMS204-B_141229A: 10** SampType: **Initial Calibration Verification Standard** Lab ID: **ICV STD** Method: **SW6020**

Analysis Date: **12/29/14 11:05** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 11	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.0589	0.0010	0.06	0	98	90	110				
Arsenic	0.0598	0.0010	0.06	0	100	90	110				
Cadmium	0.0299	0.0010	0.03	0	100	90	110				
Chromium	0.0603	0.0010	0.06	0	101	90	110				
Cobalt	0.0576	0.0010	0.06	0	96	90	110				
Lead	0.0576	0.0010	0.06	0	96	90	110				
Molybdenum	0.0594	0.0010	0.06	0	99	90	110				
Nickel	0.0614	0.0010	0.06	0	102	90	110				
Selenium	0.0600	0.0010	0.06	0	100	90	110				
Silver	0.0299	0.0010	0.03	0	100	90	110				
Uranium	0.0569	0.00030	0.06	0	95	90	110				

Associated samples: **H14120110-007A, H14120110-007B**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS141208A

Date: *31-Dec-14*

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 1** SampType: **Method Blank** Lab ID: **MB-1_141208A** Method: **A2540 D**
Analysis Date: **12/08/14 14:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-2_141208A** Method: **A2540 D**
Analysis Date: **12/08/14 14:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	96.0	10	100	0	96	80	120				

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 4** SampType: **Sample Duplicate** Lab ID: **H14120109-001A DUP** Method: **A2540 D**
Analysis Date: **12/08/14 14:26** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	11.6	2.1		0				11.33	2.5	5	

Associated samples:

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 1** SampType: **Sample Duplicate** Lab ID: **H14120109-011A DUP** Method: **A2540 D**
Analysis Date: **12/08/14 14:30** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	82.0	2.3		0				78.26	4.6	5	

Associated samples:

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 2** SampType: **Method Blank** Lab ID: **MB-25_141208A** Method: **A2540 D**
Analysis Date: **12/08/14 14:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	ND	1									

Associated samples:

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 2** SampType: **Laboratory Control Sample** Lab ID: **LCS-26_141208A** Method: **A2540 D**
Analysis Date: **12/08/14 14:33** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	95.0	10	100	0	95	80	120				

Associated samples:

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Client: Natural Resource Damage Program
Work Order: H14120110
Project: Silver Bow Creek Monitoring

ANALYTICAL QC SUMMARY REPORT

Prepared by Helena, MT Branch

BatchID: TSS141208A

Date: *31-Dec-14*

Run ID :Run Order: **ACCU-124 (14410200)_141208A: 2** SampType: **Sample Duplicate** Lab ID: **H14120110-005A DUP** Method: **A2540 D**

Analysis Date: **12/08/14 14:34** Units: **mg/L** **Prep Info:** Prep Date: Prep Method:

Analytes 1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Suspended TSS @ 105 C	3.33	2.1		0				3.132		5	

Associated samples: **H14120110-001A, H14120110-002A, H14120110-003A, H14120110-004A, H14120110-005A**

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limit
R - RPD outside accepted recovery limits
N - Analyte concentration was not sufficiently high to calculate RPD
A - Analyte concentration greater than four times the spike amount

Workorder Receipt Checklist

Natural Resource Damage Program H14120110

Login completed by: Tracy L. Lorash
Date Received: 12/5/2014
Reviewed by: BL2000\sdull
Received by: AHN
Reviewed Date: 12/10/2014
Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C See comments		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Cooler 1 was received at 3.6°C, Cooler 2 at 3.7°C, Cooler 3 at 0.4°C, Cooler 4 at 3.6°C. Samples were not received on ice. TI 12/5/14

APPENDIX C

SURFACE WATER DATA

APPENDIX C
SURFACE WATER DATA

Table C1. Surface water monitoring data from Streamside Tailings Operable Unit, 2014.

Site	Type	Lab ID	Collected Date	Parameter	Results	RL	Units	Qualifier	Method
QA Blank	Field Blank	H14030374-012	3/24/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14030374-005	3/25/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14060106-008	6/2/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14060105-001	6/3/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14090234-013	9/9/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14090234-005	9/10/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14120109-008	12/3/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14120110-001	12/4/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
SS-01	Natural Sample	H14030371-001	3/25/2014	Alkalinity, Total as CaCO3	89	4	mg/L		A2320 B
SS-01	Natural Sample	H14060105-002	6/3/2014	Alkalinity, Total as CaCO3	66	4	mg/L		A2320 B
SS-01	Duplicate	H14060105-003	6/3/2014	Alkalinity, Total as CaCO3	66	4	mg/L		A2320 B
SS-01	Natural Sample	H14090233-001	9/11/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-01	Natural Sample	H14120110-002	12/4/2014	Alkalinity, Total as CaCO3	94	4	mg/L		A2320 B
SS-01	Duplicate	H14120110-003	12/4/2014	Alkalinity, Total as CaCO3	94	4	mg/L		A2320 B
SS-05A	Natural Sample	H14030371-002	3/25/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-05A	Natural Sample	H14060105-004	6/3/2014	Alkalinity, Total as CaCO3	71	4	mg/L		A2320 B
SS-05A	Natural Sample	H14090233-002	9/11/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-05A	Natural Sample	H14120110-004	12/4/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-06G	Natural Sample	H14030374-001	3/25/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-06G	Natural Sample	H14060106-001	6/3/2014	Alkalinity, Total as CaCO3	73	4	mg/L		A2320 B
SS-06G	Natural Sample	H14090234-001	9/11/2014	Alkalinity, Total as CaCO3	96	4	mg/L		A2320 B
SS-06G	Natural Sample	H14120109-001	12/4/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-07	Natural Sample	H14030374-002	3/25/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-07	Natural Sample	H14060106-002	6/3/2014	Alkalinity, Total as CaCO3	85	4	mg/L		A2320 B
SS-07	Natural Sample	H14090234-002	9/11/2014	Alkalinity, Total as CaCO3	98	4	mg/L		A2320 B
SS-07	Natural Sample	H14120109-002	12/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B

SS-08	Duplicate	H14030374-004	3/25/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-08	Natural Sample	H14030374-003	3/25/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-08	Natural Sample	H14060106-003	6/3/2014	Alkalinity, Total as CaCO3	83	4	mg/L		A2320 B
SS-08	Natural Sample	H14090234-003	9/10/2014	Alkalinity, Total as CaCO3	90	4	mg/L		A2320 B
SS-08	Duplicate	H14090234-004	9/10/2014	Alkalinity, Total as CaCO3	90	4	mg/L		A2320 B
SS-08	Natural Sample	H14120109-003	12/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-10A	Natural Sample	H14030374-006	3/25/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-10A	Natural Sample	H14060106-004	6/3/2014	Alkalinity, Total as CaCO3	77	4	mg/L		A2320 B
SS-10A	Natural Sample	H14090234-006	9/10/2014	Alkalinity, Total as CaCO3	94	4	mg/L		A2320 B
SS-10A	Natural Sample	H14120109-004	12/4/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-10B	Natural Sample	H14030374-007	3/25/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-10B	Natural Sample	H14060106-005	6/3/2014	Alkalinity, Total as CaCO3	77	4	mg/L		A2320 B
SS-10B	Natural Sample	H14090234-007	9/10/2014	Alkalinity, Total as CaCO3	94	4	mg/L		A2320 B
SS-10B	Natural Sample	H14120109-005	12/4/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-11C	Natural Sample	H14030374-008	3/25/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-11C	Natural Sample	H14060106-006	6/3/2014	Alkalinity, Total as CaCO3	81	4	mg/L		A2320 B
SS-11C	Natural Sample	H14090234-008	9/10/2014	Alkalinity, Total as CaCO3	98	4	mg/L		A2320 B
SS-11C	Natural Sample	H14120109-006	12/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-11D	Natural Sample	H14030374-009	3/25/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-11D	Natural Sample	H14060106-007	6/3/2014	Alkalinity, Total as CaCO3	92	4	mg/L		A2320 B
SS-11D	Natural Sample	H14090234-009	9/10/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-11D	Natural Sample	H14120109-007	12/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-13	Natural Sample	H14030374-010	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-13	Duplicate	H14030374-011	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-13	Natural Sample	H14060106-009	6/2/2014	Alkalinity, Total as CaCO3	91	4	mg/L		A2320 B
SS-13	Duplicate	H14060106-010	6/2/2014	Alkalinity, Total as CaCO3	90	4	mg/L		A2320 B
SS-13	Natural Sample	H14090234-010	9/10/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-13	Natural Sample	H14120109-009	12/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-13	Duplicate	H14120109-010	12/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-14	Natural Sample	H14030374-013	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-14	Natural Sample	H14060106-011	6/2/2014	Alkalinity, Total as CaCO3	91	4	mg/L		A2320 B
SS-14	Natural Sample	H14090234-011	9/9/2014	Alkalinity, Total as CaCO3	96	4	mg/L		A2320 B
SS-14	Duplicate	H14090234-012	9/9/2014	Alkalinity, Total as CaCO3	96	4	mg/L		A2320 B
SS-14	Natural Sample	H14120109-011	12/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-15A	Natural Sample	H14030374-014	3/24/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B

SS-15A	Natural Sample	H14060106-012	6/2/2014	Alkalinity, Total as CaCO3	92	4	mg/L		A2320 B
SS-15A	Natural Sample	H14090234-014	9/9/2014	Alkalinity, Total as CaCO3	99	4	mg/L		A2320 B
SS-15A	Natural Sample	H14120109-012	12/3/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
SS-15B	Natural Sample	H14030374-015	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-15B	Natural Sample	H14060106-013	6/2/2014	Alkalinity, Total as CaCO3	79	4	mg/L		A2320 B
SS-15B	Natural Sample	H14090234-015	9/9/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-15B	Natural Sample	H14120109-013	12/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-15G	Natural Sample	H14030371-003	3/24/2014	Alkalinity, Total as CaCO3	94	4	mg/L		A2320 B
SS-15G	Natural Sample	H14060105-005	6/2/2014	Alkalinity, Total as CaCO3	68	4	mg/L		A2320 B
SS-15G	Natural Sample	H14090233-003	9/9/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-15G	Natural Sample	H14120110-005	12/3/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-16B	Natural Sample	H14030374-016	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-16B	Natural Sample	H14060106-014	6/2/2014	Alkalinity, Total as CaCO3	78	4	mg/L		A2320 B
SS-16B	Natural Sample	H14090234-016	9/9/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-16B	Natural Sample	H14120109-014	12/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-17D	Natural Sample	H14030374-017	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-17D	Natural Sample	H14060106-015	6/2/2014	Alkalinity, Total as CaCO3	76	4	mg/L		A2320 B
SS-17D	Natural Sample	H14090234-017	9/9/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-17D	Natural Sample	H14120109-015	12/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-19	Natural Sample	H14030374-018	3/24/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
SS-19	Natural Sample	H14060106-016	6/2/2014	Alkalinity, Total as CaCO3	78	4	mg/L		A2320 B
SS-19	Natural Sample	H14090234-018	9/9/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
SS-19	Natural Sample	H14120109-016	12/3/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
QA Blank	Field Blank	H14030374-012	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Aluminum, Dissolved	0.01	0.009	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Aluminum, Dissolved	0.013	0.009	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Aluminum, Dissolved	0.009	0.009	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Aluminum, Dissolved	0.009	0.009	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Aluminum, Total Recoverable	0.016	0.009	mg/L	B	E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Aluminum, Total Recoverable	ND	0.009	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Aluminum, Total Recoverable	0.092	0.009	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Aluminum, Total Recoverable	0.219	0.009	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Aluminum, Total Recoverable	0.192	0.009	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Aluminum, Total Recoverable	0.047	0.009	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Aluminum, Total Recoverable	0.125	0.009	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Aluminum, Total Recoverable	0.121	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Aluminum, Total Recoverable	0.081	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Aluminum, Total Recoverable	0.341	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Aluminum, Total Recoverable	0.094	0.009	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Aluminum, Total Recoverable	0.328	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Aluminum, Total Recoverable	0.07	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Aluminum, Total Recoverable	0.364	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Aluminum, Total Recoverable	0.097	0.009	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Aluminum, Total Recoverable	0.26	0.009	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Aluminum, Total Recoverable	0.069	0.009	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Aluminum, Total Recoverable	0.233	0.009	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Aluminum, Total Recoverable	0.077	0.009	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Aluminum, Total Recoverable	0.169	0.009	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Aluminum, Total Recoverable	0.11	0.009	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Aluminum, Total Recoverable	0.099	0.009	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Aluminum, Total Recoverable	0.319	0.009	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Aluminum, Total Recoverable	0.113	0.009	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Aluminum, Total Recoverable	0.12	0.009	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Aluminum, Total Recoverable	0.387	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Aluminum, Total Recoverable	0.126	0.009	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Aluminum, Total Recoverable	0.21	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Aluminum, Total Recoverable	0.052	0.009	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Aluminum, Total Recoverable	0.483	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Aluminum, Total Recoverable	0.12	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Aluminum, Total Recoverable	0.183	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Aluminum, Total Recoverable	0.027	0.009	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Aluminum, Total Recoverable	0.418	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Aluminum, Total Recoverable	0.147	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Aluminum, Total Recoverable	0.137	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Aluminum, Total Recoverable	0.079	0.009	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Aluminum, Total Recoverable	0.44	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Aluminum, Total Recoverable	0.118	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Aluminum, Total Recoverable	0.19	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Aluminum, Total Recoverable	0.06	0.009	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Aluminum, Total Recoverable	0.492	0.009	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Aluminum, Total Recoverable	0.289	0.009	mg/L	J	E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Aluminum, Total Recoverable	0.218	0.009	mg/L	J	E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Aluminum, Total Recoverable	0.27	0.009	mg/L	J	E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Aluminum, Total Recoverable	0.183	0.009	mg/L	J	E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Aluminum, Total Recoverable	0.089	0.009	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Aluminum, Total Recoverable	1.14	0.009	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Aluminum, Total Recoverable	1.03	0.009	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Aluminum, Total Recoverable	0.376	0.009	mg/L	J	E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Aluminum, Total Recoverable	0.202	0.009	mg/L	J	E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Aluminum, Total Recoverable	0.087	0.009	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Aluminum, Total Recoverable	0.083	0.009	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Aluminum, Total Recoverable	1.75	0.009	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Aluminum, Total Recoverable	0.325	0.009	mg/L	J	E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Aluminum, Total Recoverable	0.195	0.009	mg/L	J	E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Aluminum, Total Recoverable	0.115	0.009	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Aluminum, Total Recoverable	0.11	0.009	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Aluminum, Total Recoverable	0.242	0.009	mg/L	J	E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Aluminum, Total Recoverable	0.219	0.009	mg/L	J	E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Aluminum, Total Recoverable	0.12	0.009	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Aluminum, Total Recoverable	0.078	0.009	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Aluminum, Total Recoverable	0.168	0.009	mg/L	J	E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Aluminum, Total Recoverable	0.325	0.009	mg/L	J	E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Aluminum, Total Recoverable	0.025	0.009	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Aluminum, Total Recoverable	0.087	0.009	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Aluminum, Total Recoverable	0.193	0.009	mg/L	J	E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Aluminum, Total Recoverable	0.312	0.009	mg/L	J	E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Aluminum, Total Recoverable	0.413	0.009	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Aluminum, Total Recoverable	0.101	0.009	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Aluminum, Total Recoverable	0.246	0.009	mg/L	J	E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Aluminum, Total Recoverable	0.478	0.009	mg/L	J	E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Aluminum, Total Recoverable	0.346	0.009	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Aluminum, Total Recoverable	0.096	0.009	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Aluminum, Total Recoverable	0.234	0.009	mg/L	J	E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Aluminum, Total Recoverable	0.46	0.009	mg/L	J	E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Aluminum, Total Recoverable	0.294	0.009	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Aluminum, Total Recoverable	0.11	0.009	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Antimony, Total Recoverable	0.0005	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Antimony, Total Recoverable	0.0005	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Antimony, Total Recoverable	0.0005	0.0005	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Antimony, Total Recoverable	0.0005	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Antimony, Total Recoverable	0.0014	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Antimony, Total Recoverable	0.0005	0.0005	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Antimony, Total Recoverable	ND	0.0005	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Arsenic, Dissolved	0.013	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Arsenic, Dissolved	0.013	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Arsenic, Dissolved	0.013	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Arsenic, Dissolved	0.013	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Arsenic, Dissolved	0.014	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Arsenic, Dissolved	0.009	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Arsenic, Dissolved	0.008	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Arsenic, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Arsenic, Total Recoverable	0.003	0.001	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Arsenic, Total Recoverable	0.002	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Arsenic, Total Recoverable	0.002	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Arsenic, Total Recoverable	0.011	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Arsenic, Total Recoverable	0.011	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Arsenic, Total Recoverable	0.01	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Arsenic, Total Recoverable	0.014	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Arsenic, Total Recoverable	0.014	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Arsenic, Total Recoverable	0.013	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Arsenic, Total Recoverable	0.015	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Arsenic, Total Recoverable	0.016	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Arsenic, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Arsenic, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Arsenic, Total Recoverable	0.003	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Arsenic, Total Recoverable	0.01	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Arsenic, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Arsenic, Total Recoverable	0.008	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Arsenic, Total Recoverable	0.009	0.001	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Arsenic, Total Recoverable	0.01	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Arsenic, Total Recoverable	0.006	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Barium, Dissolved	0.02	0.003	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Barium, Dissolved	0.013	0.003	mg/L	B	E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Barium, Dissolved	0.006	0.003	mg/L	B	E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Barium, Dissolved	0.004	0.003	mg/L	B	E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Barium, Dissolved	0.004	0.003	mg/L	B	E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Barium, Dissolved	0.068	0.003	mg/L	B	E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Barium, Dissolved	0.034	0.003	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Barium, Dissolved	0.032	0.003	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Barium, Dissolved	0.057	0.003	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Barium, Dissolved	0.049	0.003	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Barium, Dissolved	0.048	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Barium, Dissolved	0.058	0.003	mg/L	B	E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Barium, Dissolved	0.031	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Barium, Dissolved	0.061	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Barium, Dissolved	0.05	0.003	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Barium, Dissolved	0.050	0.003	mg/L	B	E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Barium, Dissolved	0.03	0.003	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Barium, Dissolved	0.051	0.003	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Barium, Dissolved	0.044	0.003	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Barium, Dissolved	0.047	0.003	mg/L	B	E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Barium, Dissolved	0.03	0.003	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Barium, Dissolved	0.049	0.003	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Barium, Dissolved	0.038	0.003	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Barium, Dissolved	0.048	0.003	mg/L	B	E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Barium, Dissolved	0.050	0.003	mg/L	B	E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Barium, Dissolved	0.036	0.003	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Barium, Dissolved	0.043	0.003	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Barium, Dissolved	0.045	0.003	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Barium, Dissolved	0.039	0.003	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Barium, Dissolved	0.048	0.003	mg/L	B	E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Barium, Dissolved	0.034	0.003	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Barium, Dissolved	0.039	0.003	mg/L	B	E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Barium, Dissolved	0.04	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Barium, Dissolved	0.048	0.003	mg/L	B	E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Barium, Dissolved	0.037	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Barium, Dissolved	0.040	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Barium, Dissolved	0.039	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Barium, Dissolved	0.051	0.003	mg/L	B	E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Barium, Dissolved	0.038	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Barium, Dissolved	0.046	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Barium, Dissolved	0.043	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Barium, Dissolved	0.051	0.003	mg/L	B	E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Barium, Dissolved	0.037	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Barium, Dissolved	0.049	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Barium, Dissolved	0.042	0.003	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Barium, Dissolved	0.048	0.003	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Barium, Dissolved	0.049	0.003	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Barium, Dissolved	0.036	0.003	mg/L	B	E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Barium, Dissolved	0.035	0.003	mg/L	B	E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Barium, Dissolved	0.053	0.003	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Barium, Dissolved	0.04	0.003	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Barium, Dissolved	0.042	0.003	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Barium, Dissolved	0.049	0.003	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Barium, Dissolved	0.034	0.003	mg/L	B	E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Barium, Dissolved	0.038	0.003	mg/L	B	E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Barium, Dissolved	0.036	0.003	mg/L	B	E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Barium, Dissolved	0.04	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Barium, Dissolved	0.05	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Barium, Dissolved	0.032	0.003	mg/L	B	E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Barium, Dissolved	0.040	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Barium, Dissolved	0.039	0.003	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Barium, Dissolved	0.043	0.003	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Barium, Dissolved	0.043	0.003	mg/L	B	E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Barium, Dissolved	0.039	0.003	mg/L	B	E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Barium, Dissolved	0.033	0.003	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Barium, Dissolved	0.035	0.003	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Barium, Dissolved	0.040	0.003	mg/L	B	E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Barium, Dissolved	0.026	0.003	mg/L	B	E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Barium, Dissolved	0.021	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Barium, Dissolved	0.046	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Barium, Dissolved	0.048	0.003	mg/L	B	E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Barium, Dissolved	0.042	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Barium, Dissolved	0.035	0.003	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Barium, Dissolved	0.044	0.003	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Barium, Dissolved	0.029	0.003	mg/L	B	E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Barium, Dissolved	0.038	0.003	mg/L	B	E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Barium, Dissolved	0.035	0.003	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Barium, Dissolved	0.045	0.003	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Barium, Dissolved	0.030	0.003	mg/L	B	E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Barium, Dissolved	0.042	0.003	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Barium, Dissolved	0.037	0.003	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Barium, Total Recoverable	ND	0.003	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Barium, Total Recoverable	0.049	0.003	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Barium, Total Recoverable	0.028	0.003	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Barium, Total Recoverable	0.029	0.003	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Barium, Total Recoverable	0.051	0.003	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Barium, Total Recoverable	0.05	0.003	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Barium, Total Recoverable	0.05	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Barium, Total Recoverable	0.051	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Barium, Total Recoverable	0.035	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Barium, Total Recoverable	0.055	0.003	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Barium, Total Recoverable	0.055	0.003	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Barium, Total Recoverable	0.046	0.003	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Barium, Total Recoverable	0.032	0.003	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Barium, Total Recoverable	0.046	0.003	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Barium, Total Recoverable	0.047	0.003	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Barium, Total Recoverable	0.041	0.003	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Barium, Total Recoverable	0.03	0.003	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Barium, Total Recoverable	0.045	0.003	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Barium, Total Recoverable	0.041	0.003	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Barium, Total Recoverable	0.042	0.003	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Barium, Total Recoverable	0.042	0.003	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Barium, Total Recoverable	0.035	0.003	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Barium, Total Recoverable	0.039	0.003	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Barium, Total Recoverable	0.039	0.003	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Barium, Total Recoverable	0.046	0.003	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Barium, Total Recoverable	0.041	0.003	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Barium, Total Recoverable	0.033	0.003	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Barium, Total Recoverable	0.035	0.003	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Barium, Total Recoverable	0.048	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Barium, Total Recoverable	0.042	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Barium, Total Recoverable	0.033	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Barium, Total Recoverable	0.037	0.003	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Barium, Total Recoverable	0.047	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Barium, Total Recoverable	0.048	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Barium, Total Recoverable	0.036	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Barium, Total Recoverable	0.044	0.003	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Barium, Total Recoverable	0.052	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Barium, Total Recoverable	0.047	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Barium, Total Recoverable	0.035	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Barium, Total Recoverable	0.046	0.003	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Barium, Total Recoverable	0.05	0.003	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Barium, Total Recoverable	0.046	0.003	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Barium, Total Recoverable	0.043	0.003	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Barium, Total Recoverable	0.034	0.003	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Barium, Total Recoverable	0.03	0.003	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Barium, Total Recoverable	0.048	0.003	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Barium, Total Recoverable	0.061	0.003	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Barium, Total Recoverable	0.058	0.003	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Barium, Total Recoverable	0.046	0.003	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Barium, Total Recoverable	0.033	0.003	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Barium, Total Recoverable	0.033	0.003	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Barium, Total Recoverable	0.033	0.003	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Barium, Total Recoverable	0.074	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Barium, Total Recoverable	0.048	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Barium, Total Recoverable	0.032	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Barium, Total Recoverable	0.038	0.003	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Barium, Total Recoverable	0.041	0.003	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Barium, Total Recoverable	0.042	0.003	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Barium, Total Recoverable	0.024	0.003	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Barium, Total Recoverable	0.037	0.003	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Barium, Total Recoverable	0.034	0.003	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Barium, Total Recoverable	0.024	0.003	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Barium, Total Recoverable	0.018	0.003	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Barium, Total Recoverable	0.022	0.003	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Barium, Total Recoverable	0.02	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Barium, Total Recoverable	0.043	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Barium, Total Recoverable	0.025	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Barium, Total Recoverable	0.043	0.003	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Barium, Total Recoverable	0.036	0.003	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Barium, Total Recoverable	0.04	0.003	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Barium, Total Recoverable	0.029	0.003	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Barium, Total Recoverable	0.039	0.003	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Barium, Total Recoverable	0.035	0.003	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Barium, Total Recoverable	0.04	0.003	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Barium, Total Recoverable	0.03	0.003	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Barium, Total Recoverable	0.041	0.003	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Barium, Total Recoverable	0.037	0.003	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Beryllium, Total Recoverable	ND	0.0008	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14030374-005	3/25/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14060106-008	6/2/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14060105-001	6/3/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14090234-013	9/9/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14090234-005	9/10/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14120109-008	12/3/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
QA Blank	Field Blank	H14120110-001	12/4/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
SS-01	Natural Sample	H14030371-001	3/25/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-01	Natural Sample	H14060105-002	6/3/2014	Bicarbonate Alkalinity as HCO3	79	4	mg/L		A2320 B
SS-01	Duplicate	H14060105-003	6/3/2014	Bicarbonate Alkalinity as HCO3	79	4	mg/L		A2320 B
SS-01	Natural Sample	H14090233-001	9/11/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B

SS-01	Natural Sample	H14120110-002	12/4/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-01	Duplicate	H14120110-003	12/4/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-05A	Natural Sample	H14030371-002	3/25/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-05A	Natural Sample	H14060105-004	6/3/2014	Bicarbonate Alkalinity as HCO3	80	4	mg/L		A2320 B
SS-05A	Natural Sample	H14090233-002	9/11/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-05A	Natural Sample	H14120110-004	12/4/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-06G	Natural Sample	H14030374-001	3/25/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-06G	Natural Sample	H14060106-001	6/3/2014	Bicarbonate Alkalinity as HCO3	81	4	mg/L		A2320 B
SS-06G	Natural Sample	H14090234-001	9/11/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-06G	Natural Sample	H14120109-001	12/4/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-07	Natural Sample	H14030374-002	3/25/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-07	Natural Sample	H14060106-002	6/3/2014	Bicarbonate Alkalinity as HCO3	100	4	mg/L		A2320 B
SS-07	Natural Sample	H14090234-002	9/11/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-07	Natural Sample	H14120109-002	12/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
SS-08	Duplicate	H14030374-004	3/25/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-08	Natural Sample	H14030374-003	3/25/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-08	Natural Sample	H14060106-003	6/3/2014	Bicarbonate Alkalinity as HCO3	100	4	mg/L		A2320 B
SS-08	Natural Sample	H14090234-003	9/10/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-08	Duplicate	H14090234-004	9/10/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-08	Natural Sample	H14120109-003	12/4/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-10A	Natural Sample	H14030374-006	3/25/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-10A	Natural Sample	H14060106-004	6/3/2014	Bicarbonate Alkalinity as HCO3	94	4	mg/L		A2320 B
SS-10A	Natural Sample	H14090234-006	9/10/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-10A	Natural Sample	H14120109-004	12/4/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-10B	Natural Sample	H14030374-007	3/25/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-10B	Natural Sample	H14060106-005	6/3/2014	Bicarbonate Alkalinity as HCO3	93	4	mg/L		A2320 B
SS-10B	Natural Sample	H14090234-007	9/10/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-10B	Natural Sample	H14120109-005	12/4/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-11C	Natural Sample	H14030374-008	3/25/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-11C	Natural Sample	H14060106-006	6/3/2014	Bicarbonate Alkalinity as HCO3	98	4	mg/L		A2320 B
SS-11C	Natural Sample	H14090234-008	9/10/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-11C	Natural Sample	H14120109-006	12/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
SS-11D	Natural Sample	H14030374-009	3/25/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
SS-11D	Natural Sample	H14060106-007	6/3/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-11D	Natural Sample	H14090234-009	9/10/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B

SS-11D	Natural Sample	H14120109-007	12/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
SS-13	Natural Sample	H14030374-010	3/24/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-13	Duplicate	H14030374-011	3/24/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-13	Natural Sample	H14060106-009	6/2/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-13	Duplicate	H14060106-010	6/2/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-13	Natural Sample	H14090234-010	9/10/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-13	Natural Sample	H14120109-009	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-13	Duplicate	H14120109-010	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-14	Natural Sample	H14030374-013	3/24/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-14	Natural Sample	H14060106-011	6/2/2014	Bicarbonate Alkalinity as HCO3	100	4	mg/L		A2320 B
SS-14	Natural Sample	H14090234-011	9/9/2014	Bicarbonate Alkalinity as HCO3	95	4	mg/L		A2320 B
SS-14	Duplicate	H14090234-012	9/9/2014	Bicarbonate Alkalinity as HCO3	95	4	mg/L		A2320 B
SS-14	Natural Sample	H14120109-011	12/3/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-15A	Natural Sample	H14030374-014	3/24/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-15A	Natural Sample	H14060106-012	6/2/2014	Bicarbonate Alkalinity as HCO3	100	4	mg/L		A2320 B
SS-15A	Natural Sample	H14090234-014	9/9/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-15A	Natural Sample	H14120109-012	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-15B	Natural Sample	H14030374-015	3/24/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-15B	Natural Sample	H14060106-013	6/2/2014	Bicarbonate Alkalinity as HCO3	96	4	mg/L		A2320 B
SS-15B	Natural Sample	H14090234-015	9/9/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
SS-15B	Natural Sample	H14120109-013	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-15G	Natural Sample	H14030371-003	3/24/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-15G	Natural Sample	H14060105-005	6/2/2014	Bicarbonate Alkalinity as HCO3	83	4	mg/L		A2320 B
SS-15G	Natural Sample	H14090233-003	9/9/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-15G	Natural Sample	H14120110-005	12/3/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-16B	Natural Sample	H14030374-016	3/24/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-16B	Natural Sample	H14060106-014	6/2/2014	Bicarbonate Alkalinity as HCO3	94	4	mg/L		A2320 B
SS-16B	Natural Sample	H14090234-016	9/9/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-16B	Natural Sample	H14120109-014	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-17D	Natural Sample	H14030374-017	3/24/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-17D	Natural Sample	H14060106-015	6/2/2014	Bicarbonate Alkalinity as HCO3	92	4	mg/L		A2320 B
SS-17D	Natural Sample	H14090234-017	9/9/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-17D	Natural Sample	H14120109-015	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
SS-19	Natural Sample	H14030374-018	3/24/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
SS-19	Natural Sample	H14060106-016	6/2/2014	Bicarbonate Alkalinity as HCO3	94	4	mg/L		A2320 B

SS-19	Natural Sample	H14090234-018	9/9/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
SS-19	Natural Sample	H14120109-016	12/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
QA Blank	Field Blank	H14030374-012	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14030374-005	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14060106-008	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14060105-001	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14090234-013	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14090234-005	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14120109-008	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14120110-001	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-01	Natural Sample	H14030371-001	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-01	Natural Sample	H14060105-002	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-01	Duplicate	H14060105-003	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-01	Natural Sample	H14090233-001	9/11/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-01	Natural Sample	H14120110-002	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-01	Duplicate	H14120110-003	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-05A	Natural Sample	H14030371-002	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-05A	Natural Sample	H14060105-004	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-05A	Natural Sample	H14090233-002	9/11/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-05A	Natural Sample	H14120110-004	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-06G	Natural Sample	H14030374-001	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-06G	Natural Sample	H14060106-001	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-06G	Natural Sample	H14090234-001	9/11/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-06G	Natural Sample	H14120109-001	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-07	Natural Sample	H14030374-002	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-07	Natural Sample	H14060106-002	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-07	Natural Sample	H14090234-002	9/11/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-07	Natural Sample	H14120109-002	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-08	Duplicate	H14030374-004	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-08	Natural Sample	H14030374-003	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-08	Natural Sample	H14060106-003	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-08	Natural Sample	H14090234-003	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-08	Duplicate	H14090234-004	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-08	Natural Sample	H14120109-003	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10A	Natural Sample	H14030374-006	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7

SS-10A	Natural Sample	H14060106-004	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10A	Natural Sample	H14090234-006	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10A	Natural Sample	H14120109-004	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10B	Natural Sample	H14030374-007	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10B	Natural Sample	H14060106-005	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10B	Natural Sample	H14090234-007	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-10B	Natural Sample	H14120109-005	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11C	Natural Sample	H14030374-008	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11C	Natural Sample	H14060106-006	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11C	Natural Sample	H14090234-008	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11C	Natural Sample	H14120109-006	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11D	Natural Sample	H14030374-009	3/25/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11D	Natural Sample	H14060106-007	6/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11D	Natural Sample	H14090234-009	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-11D	Natural Sample	H14120109-007	12/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Natural Sample	H14030374-010	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Duplicate	H14030374-011	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Natural Sample	H14060106-009	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Duplicate	H14060106-010	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Natural Sample	H14090234-010	9/10/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Natural Sample	H14120109-009	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-13	Duplicate	H14120109-010	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-14	Natural Sample	H14030374-013	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-14	Natural Sample	H14060106-011	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-14	Natural Sample	H14090234-011	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-14	Duplicate	H14090234-012	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-14	Natural Sample	H14120109-011	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15A	Natural Sample	H14030374-014	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15A	Natural Sample	H14060106-012	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15A	Natural Sample	H14090234-014	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15A	Natural Sample	H14120109-012	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15B	Natural Sample	H14030374-015	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15B	Natural Sample	H14060106-013	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15B	Natural Sample	H14090234-015	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15B	Natural Sample	H14120109-013	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7

SS-15G	Natural Sample	H14030371-003	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15G	Natural Sample	H14060105-005	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15G	Natural Sample	H14090233-003	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-15G	Natural Sample	H14120110-005	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-16B	Natural Sample	H14030374-016	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-16B	Natural Sample	H14060106-014	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-16B	Natural Sample	H14090234-016	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-16B	Natural Sample	H14120109-014	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-17D	Natural Sample	H14030374-017	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-17D	Natural Sample	H14060106-015	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-17D	Natural Sample	H14090234-017	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-17D	Natural Sample	H14120109-015	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-19	Natural Sample	H14030374-018	3/24/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-19	Natural Sample	H14060106-016	6/2/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-19	Natural Sample	H14090234-018	9/9/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
SS-19	Natural Sample	H14120109-016	12/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
QA Blank	Field Blank	H14030374-012	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Boron, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Cadmium, Dissolved	0.00007	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Cadmium, Dissolved	0.00003	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Cadmium, Dissolved	0.00004	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Cadmium, Dissolved	0.00004	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Cadmium, Dissolved	0.00005	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Cadmium, Dissolved	0.00010	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Cadmium, Dissolved	0.00004	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Cadmium, Dissolved	0.00005	0.00003	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Cadmium, Dissolved	0.00012	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Cadmium, Dissolved	0.00024	0.00003	mg/L	J	E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Cadmium, Dissolved	0.00013	0.00003	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Cadmium, Dissolved	0.00013	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Cadmium, Dissolved	0.00009	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Cadmium, Dissolved	0.00013	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Cadmium, Dissolved	0.00016	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Cadmium, Dissolved	0.00016	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Cadmium, Dissolved	0.00019	0.00003	mg/L	J	E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Cadmium, Dissolved	0.0001	0.00003	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Cadmium, Dissolved	0.00018	0.00003	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Cadmium, Dissolved	0.00016	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Cadmium, Dissolved	0.00018	0.00003	mg/L	J	E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Cadmium, Dissolved	0.0002	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Cadmium, Dissolved	0.00012	0.00003	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Cadmium, Dissolved	0.0002	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Cadmium, Dissolved	0.0001	0.00003	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Cadmium, Dissolved	0.0001	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Cadmium, Dissolved	0.00013	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Cadmium, Dissolved	0.00017	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Cadmium, Dissolved	0.00012	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Cadmium, Dissolved	0.00023	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Cadmium, Dissolved	0.0001	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Cadmium, Dissolved	0.00013	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Cadmium, Dissolved	0.00021	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Cadmium, Dissolved	0.00017	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Cadmium, Dissolved	0.00011	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Cadmium, Dissolved	0.00022	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Cadmium, Dissolved	0.0004	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Cadmium, Dissolved	0.00041	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Cadmium, Dissolved	0.00018	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Cadmium, Dissolved	0.00045	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Cadmium, Dissolved	0.00039	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Cadmium, Dissolved	0.00009	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Cadmium, Dissolved	0.0002	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Cadmium, Dissolved	0.00042	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Cadmium, Total Recoverable	0.00012	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Cadmium, Total Recoverable	0.00005	0.00003	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Cadmium, Total Recoverable	0.00005	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Cadmium, Total Recoverable	0.00004	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Cadmium, Total Recoverable	0.00012	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Cadmium, Total Recoverable	0.00012	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Cadmium, Total Recoverable	0.00011	0.00003	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Cadmium, Total Recoverable	0.00017	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Cadmium, Total Recoverable	0.00015	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Cadmium, Total Recoverable	0.00017	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Cadmium, Total Recoverable	0.00015	0.00003	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Cadmium, Total Recoverable	0.00014	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Cadmium, Total Recoverable	0.00015	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Cadmium, Total Recoverable	0.00012	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Cadmium, Total Recoverable	0.00014	0.00003	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Cadmium, Total Recoverable	0.00012	0.00003	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Cadmium, Total Recoverable	0.00023	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Cadmium, Total Recoverable	0.00025	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Cadmium, Total Recoverable	0.00023	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Cadmium, Total Recoverable	0.00025	0.00003	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Cadmium, Total Recoverable	0.00025	0.00003	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Cadmium, Total Recoverable	0.00031	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Cadmium, Total Recoverable	0.00029	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Cadmium, Total Recoverable	0.00023	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Cadmium, Total Recoverable	0.00025	0.00003	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Cadmium, Total Recoverable	0.00047	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Cadmium, Total Recoverable	0.00032	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Cadmium, Total Recoverable	0.00024	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Cadmium, Total Recoverable	0.00024	0.00003	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Cadmium, Total Recoverable	0.00072	0.00003	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Cadmium, Total Recoverable	0.00036	0.00003	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Cadmium, Total Recoverable	0.00028	0.00003	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Cadmium, Total Recoverable	0.00027	0.00003	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Cadmium, Total Recoverable	0.00055	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Cadmium, Total Recoverable	0.00032	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Cadmium, Total Recoverable	0.00025	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Cadmium, Total Recoverable	0.00031	0.00003	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Cadmium, Total Recoverable	0.00051	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Cadmium, Total Recoverable	0.00038	0.00003	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Cadmium, Total Recoverable	0.0003	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Cadmium, Total Recoverable	0.00022	0.00003	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Cadmium, Total Recoverable	0.00022	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Cadmium, Total Recoverable	0.00028	0.00003	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Cadmium, Total Recoverable	0.0009	0.00003	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Cadmium, Total Recoverable	0.00086	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Cadmium, Total Recoverable	0.00038	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Cadmium, Total Recoverable	0.00027	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Cadmium, Total Recoverable	0.00023	0.00003	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Cadmium, Total Recoverable	0.00023	0.00003	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Cadmium, Total Recoverable	0.00119	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Cadmium, Total Recoverable	0.00047	0.00003	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Cadmium, Total Recoverable	0.00029	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Cadmium, Total Recoverable	0.00025	0.00003	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Cadmium, Total Recoverable	0.00031	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Cadmium, Total Recoverable	0.00032	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Cadmium, Total Recoverable	0.00034	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Cadmium, Total Recoverable	0.0002	0.00003	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Cadmium, Total Recoverable	0.00021	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Cadmium, Total Recoverable	0.00003	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Cadmium, Total Recoverable	0.00004	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Cadmium, Total Recoverable	ND	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Cadmium, Total Recoverable	0.00097	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Cadmium, Total Recoverable	0.0002	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Cadmium, Total Recoverable	0.0004	0.00003	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Cadmium, Total Recoverable	0.00044	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Cadmium, Total Recoverable	0.00058	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Cadmium, Total Recoverable	0.00038	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Cadmium, Total Recoverable	0.00045	0.00003	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Cadmium, Total Recoverable	0.00049	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Cadmium, Total Recoverable	0.00054	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Cadmium, Total Recoverable	0.00026	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Cadmium, Total Recoverable	0.00043	0.00003	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Cadmium, Total Recoverable	0.00047	0.00003	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Calcium, Total Recoverable	ND	1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Calcium, Total Recoverable	32	1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Calcium, Total Recoverable	22	1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Calcium, Total Recoverable	22	1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Calcium, Total Recoverable	36	1	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Calcium, Total Recoverable	33	1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Calcium, Total Recoverable	33	1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Calcium, Total Recoverable	34	1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Calcium, Total Recoverable	25	1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Calcium, Total Recoverable	39	1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Calcium, Total Recoverable	39	1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Calcium, Total Recoverable	48	1	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Calcium, Total Recoverable	31	1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Calcium, Total Recoverable	56	1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Calcium, Total Recoverable	43	1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Calcium, Total Recoverable	31	1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Calcium, Total Recoverable	53	1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Calcium, Total Recoverable	45	1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Calcium, Total Recoverable	43	1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Calcium, Total Recoverable	43	1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Calcium, Total Recoverable	31	1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Calcium, Total Recoverable	50	1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Calcium, Total Recoverable	50	1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Calcium, Total Recoverable	47	1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Calcium, Total Recoverable	46	1	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Calcium, Total Recoverable	34	1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Calcium, Total Recoverable	53	1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Calcium, Total Recoverable	46	1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Calcium, Total Recoverable	33	1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Calcium, Total Recoverable	57	1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Calcium, Total Recoverable	39	1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Calcium, Total Recoverable	61	1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Calcium, Total Recoverable	64	1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Calcium, Total Recoverable	53	1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Calcium, Total Recoverable	36	1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Calcium, Total Recoverable	60	1	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Calcium, Total Recoverable	61	1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Calcium, Total Recoverable	36	1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Calcium, Total Recoverable	29	1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Calcium, Total Recoverable	59	1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Calcium, Total Recoverable	61	1	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Calcium, Total Recoverable	60	1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Calcium, Total Recoverable	52	1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Calcium, Total Recoverable	37	1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Calcium, Total Recoverable	58	1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Calcium, Total Recoverable	59	1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Calcium, Total Recoverable	61	1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Calcium, Total Recoverable	53	1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Calcium, Total Recoverable	38	1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Calcium, Total Recoverable	59	1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Calcium, Total Recoverable	61	1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Calcium, Total Recoverable	47	1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Calcium, Total Recoverable	31	1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Calcium, Total Recoverable	56	1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Calcium, Total Recoverable	53	1	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Calcium, Total Recoverable	32	1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Calcium, Total Recoverable	28	1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Calcium, Total Recoverable	39	1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Calcium, Total Recoverable	35	1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Calcium, Total Recoverable	50	1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Calcium, Total Recoverable	30	1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Calcium, Total Recoverable	56	1	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Calcium, Total Recoverable	55	1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Calcium, Total Recoverable	50	1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Calcium, Total Recoverable	31	1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Calcium, Total Recoverable	56	1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Calcium, Total Recoverable	58	1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Calcium, Total Recoverable	50	1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Calcium, Total Recoverable	31	1	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Calcium, Total Recoverable	57	1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Calcium, Total Recoverable	58	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Chloride	6	1	mg/L	B	E300.0
QA Blank	Field Blank	H14030374-005	3/25/2014	Chloride	85	1	mg/L	B	E300.0
QA Blank	Field Blank	H14060106-008	6/2/2014	Chloride	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14060105-001	6/3/2014	Chloride	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14090234-013	9/9/2014	Chloride	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14090234-005	9/10/2014	Chloride	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14120109-008	12/3/2014	Chloride	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14120110-001	12/4/2014	Chloride	ND	1	mg/L		E300.0
SS-01	Natural Sample	H14030371-001	3/25/2014	Chloride	16	1	mg/L	B	E300.0
SS-01	Natural Sample	H14060105-002	6/3/2014	Chloride	5	1	mg/L		E300.0
SS-01	Duplicate	H14060105-003	6/3/2014	Chloride	5	1	mg/L		E300.0
SS-01	Natural Sample	H14090233-001	9/11/2014	Chloride	12	1	mg/L		E300.0
SS-01	Natural Sample	H14120110-002	12/4/2014	Chloride	16	1	mg/L		E300.0
SS-01	Duplicate	H14120110-003	12/4/2014	Chloride	16	1	mg/L		E300.0
SS-05A	Natural Sample	H14030371-002	3/25/2014	Chloride	23	1	mg/L	B	E300.0
SS-05A	Natural Sample	H14060105-004	6/3/2014	Chloride	8	1	mg/L		E300.0
SS-05A	Natural Sample	H14090233-002	9/11/2014	Chloride	17	1	mg/L		E300.0
SS-05A	Natural Sample	H14120110-004	12/4/2014	Chloride	24	1	mg/L		E300.0
SS-06G	Natural Sample	H14030374-001	3/25/2014	Chloride	34	1	mg/L	B	E300.0
SS-06G	Natural Sample	H14060106-001	6/3/2014	Chloride	12	1	mg/L		E300.0
SS-06G	Natural Sample	H14090234-001	9/11/2014	Chloride	27	1	mg/L		E300.0
SS-06G	Natural Sample	H14120109-001	12/4/2014	Chloride	27	1	mg/L		E300.0
SS-07	Natural Sample	H14030374-002	3/25/2014	Chloride	43	1	mg/L	B	E300.0
SS-07	Natural Sample	H14060106-002	6/3/2014	Chloride	15	1	mg/L		E300.0
SS-07	Natural Sample	H14090234-002	9/11/2014	Chloride	29	1	mg/L		E300.0
SS-07	Natural Sample	H14120109-002	12/4/2014	Chloride	35	1	mg/L		E300.0
SS-08	Duplicate	H14030374-004	3/25/2014	Chloride	38	1	mg/L	B	E300.0
SS-08	Natural Sample	H14030374-003	3/25/2014	Chloride	39	1	mg/L	B	E300.0
SS-08	Natural Sample	H14060106-003	6/3/2014	Chloride	16	1	mg/L		E300.0
SS-08	Natural Sample	H14090234-003	9/10/2014	Chloride	32	1	mg/L		E300.0
SS-08	Duplicate	H14090234-004	9/10/2014	Chloride	32	1	mg/L		E300.0
SS-08	Natural Sample	H14120109-003	12/4/2014	Chloride	33	1	mg/L		E300.0
SS-10A	Natural Sample	H14030374-006	3/25/2014	Chloride	36	1	mg/L	B	E300.0

SS-10A	Natural Sample	H14060106-004	6/3/2014	Chloride	16	1	mg/L		E300.0
SS-10A	Natural Sample	H14090234-006	9/10/2014	Chloride	32	1	mg/L		E300.0
SS-10A	Natural Sample	H14120109-004	12/4/2014	Chloride	31	1	mg/L		E300.0
SS-10B	Natural Sample	H14030374-007	3/25/2014	Chloride	38	1	mg/L	B	E300.0
SS-10B	Natural Sample	H14060106-005	6/3/2014	Chloride	16	1	mg/L		E300.0
SS-10B	Natural Sample	H14090234-007	9/10/2014	Chloride	32	1	mg/L		E300.0
SS-10B	Natural Sample	H14120109-005	12/4/2014	Chloride	32	1	mg/L		E300.0
SS-11C	Natural Sample	H14030374-008	3/25/2014	Chloride	63	1	mg/L	B	E300.0
SS-11C	Natural Sample	H14060106-006	6/3/2014	Chloride	26	1	mg/L		E300.0
SS-11C	Natural Sample	H14090234-008	9/10/2014	Chloride	53	1	mg/L		E300.0
SS-11C	Natural Sample	H14120109-006	12/4/2014	Chloride	56	1	mg/L		E300.0
SS-11D	Natural Sample	H14030374-009	3/25/2014	Chloride	55	1	mg/L	B	E300.0
SS-11D	Natural Sample	H14060106-007	6/3/2014	Chloride	20	1	mg/L		E300.0
SS-11D	Natural Sample	H14090234-009	9/10/2014	Chloride	52	1	mg/L		E300.0
SS-11D	Natural Sample	H14120109-007	12/4/2014	Chloride	52	1	mg/L		E300.0
SS-13	Natural Sample	H14030374-010	3/24/2014	Chloride	51	1	mg/L	B	E300.0
SS-13	Duplicate	H14030374-011	3/24/2014	Chloride	50	1	mg/L	B	E300.0
SS-13	Natural Sample	H14060106-009	6/2/2014	Chloride	20	1	mg/L		E300.0
SS-13	Duplicate	H14060106-010	6/2/2014	Chloride	20	1	mg/L		E300.0
SS-13	Natural Sample	H14090234-010	9/10/2014	Chloride	51	1	mg/L		E300.0
SS-13	Natural Sample	H14120109-009	12/3/2014	Chloride	48	1	mg/L		E300.0
SS-13	Duplicate	H14120109-010	12/3/2014	Chloride	49	1	mg/L		E300.0
SS-14	Natural Sample	H14030374-013	3/24/2014	Chloride	53	1	mg/L	B	E300.0
SS-14	Natural Sample	H14060106-011	6/2/2014	Chloride	20	1	mg/L		E300.0
SS-14	Natural Sample	H14090234-011	9/9/2014	Chloride	51	1	mg/L		E300.0
SS-14	Duplicate	H14090234-012	9/9/2014	Chloride	52	1	mg/L		E300.0
SS-14	Natural Sample	H14120109-011	12/3/2014	Chloride	48	1	mg/L		E300.0
SS-15A	Natural Sample	H14030374-014	3/24/2014	Chloride	55	1	mg/L	B	E300.0
SS-15A	Natural Sample	H14060106-012	6/2/2014	Chloride	21	1	mg/L		E300.0
SS-15A	Natural Sample	H14090234-014	9/9/2014	Chloride	49	1	mg/L		E300.0
SS-15A	Natural Sample	H14120109-012	12/3/2014	Chloride	48	1	mg/L		E300.0
SS-15B	Natural Sample	H14030374-015	3/24/2014	Chloride	37	1	mg/L	B	E300.0
SS-15B	Natural Sample	H14060106-013	6/2/2014	Chloride	8	1	mg/L		E300.0
SS-15B	Natural Sample	H14090234-015	9/9/2014	Chloride	40	1	mg/L		E300.0
SS-15B	Natural Sample	H14120109-013	12/3/2014	Chloride	34	1	mg/L		E300.0

SS-15G	Natural Sample	H14030371-003	3/24/2014	Chloride	2	1	mg/L	B	E300.0
SS-15G	Natural Sample	H14060105-005	6/2/2014	Chloride	ND	1	mg/L		E300.0
SS-15G	Natural Sample	H14090233-003	9/9/2014	Chloride	ND	1	mg/L		E300.0
SS-15G	Natural Sample	H14120110-005	12/3/2014	Chloride	ND	1	mg/L		E300.0
SS-16B	Natural Sample	H14030374-016	3/24/2014	Chloride	46	1	mg/L	B	E300.0
SS-16B	Natural Sample	H14060106-014	6/2/2014	Chloride	8	1	mg/L		E300.0
SS-16B	Natural Sample	H14090234-016	9/9/2014	Chloride	38	1	mg/L		E300.0
SS-16B	Natural Sample	H14120109-014	12/3/2014	Chloride	36	1	mg/L		E300.0
SS-17D	Natural Sample	H14030374-017	3/24/2014	Chloride	42	1	mg/L	B	E300.0
SS-17D	Natural Sample	H14060106-015	6/2/2014	Chloride	8	1	mg/L		E300.0
SS-17D	Natural Sample	H14090234-017	9/9/2014	Chloride	39	1	mg/L		E300.0
SS-17D	Natural Sample	H14120109-015	12/3/2014	Chloride	36	1	mg/L		E300.0
SS-19	Natural Sample	H14030374-018	3/24/2014	Chloride	40	1	mg/L	B	E300.0
SS-19	Natural Sample	H14060106-016	6/2/2014	Chloride	9	1	mg/L		E300.0
SS-19	Natural Sample	H14090234-018	9/9/2014	Chloride	38	1	mg/L		E300.0
SS-19	Natural Sample	H14120109-016	12/3/2014	Chloride	35	1	mg/L		E300.0
QA Blank	Field Blank	H14030374-012	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Chromium, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Cobalt, Total Recoverable	ND	0.01	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Copper, Dissolved	0.003	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Copper, Dissolved	0.004	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Copper, Dissolved	0.007	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Copper, Dissolved	0.005	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Copper, Dissolved	0.007	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Copper, Dissolved	0.003	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Copper, Dissolved	0.003	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Copper, Dissolved	0.005	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Copper, Dissolved	0.005	0.001	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Copper, Dissolved	0.009	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Copper, Dissolved	0.009	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Copper, Dissolved	0.015	0.001	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Copper, Dissolved	0.015	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Copper, Dissolved	0.014	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Copper, Dissolved	0.016	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Copper, Dissolved	0.015	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Copper, Dissolved	0.014	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Copper, Dissolved	0.014	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Copper, Dissolved	0.013	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Copper, Dissolved	0.013	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Copper, Dissolved	0.013	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Copper, Dissolved	0.009	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Copper, Dissolved	0.013	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Copper, Dissolved	0.009	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Copper, Dissolved	0.016	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Copper, Dissolved	0.018	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Copper, Dissolved	0.017	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Copper, Dissolved	0.016	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Copper, Dissolved	0.016	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Copper, Total Recoverable	0.005	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Copper, Total Recoverable	0.009	0.001	mg/L	J	E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Copper, Total Recoverable	0.015	0.001	mg/L	J	E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Copper, Total Recoverable	0.003	0.001	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Copper, Total Recoverable	0.003	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Copper, Total Recoverable	0.003	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Copper, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Copper, Total Recoverable	0.024	0.001	mg/L	J	E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Copper, Total Recoverable	0.007	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Copper, Total Recoverable	0.012	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Copper, Total Recoverable	0.008	0.001	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Copper, Total Recoverable	0.025	0.001	mg/L	J	E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Copper, Total Recoverable	0.01	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Copper, Total Recoverable	0.012	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Copper, Total Recoverable	0.012	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Copper, Total Recoverable	0.021	0.001	mg/L	J	E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Copper, Total Recoverable	0.012	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Copper, Total Recoverable	0.012	0.001	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Copper, Total Recoverable	0.017	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Copper, Total Recoverable	0.016	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Copper, Total Recoverable	0.029	0.001	mg/L	J	E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Copper, Total Recoverable	0.017	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Copper, Total Recoverable	0.017	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Copper, Total Recoverable	0.025	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Copper, Total Recoverable	0.024	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Copper, Total Recoverable	0.026	0.001	mg/L	J	E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Copper, Total Recoverable	0.022	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Copper, Total Recoverable	0.043	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Copper, Total Recoverable	0.025	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Copper, Total Recoverable	0.026	0.001	mg/L	J	E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Copper, Total Recoverable	0.023	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Copper, Total Recoverable	0.040	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Copper, Total Recoverable	0.022	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Copper, Total Recoverable	0.024	0.001	mg/L	J	E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Copper, Total Recoverable	0.023	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Copper, Total Recoverable	0.040	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Copper, Total Recoverable	0.02	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Copper, Total Recoverable	0.020	0.001	mg/L	J	E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Copper, Total Recoverable	0.022	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Copper, Total Recoverable	0.039	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Copper, Total Recoverable	0.024	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Copper, Total Recoverable	0.019	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Copper, Total Recoverable	0.02	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Copper, Total Recoverable	0.018	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Copper, Total Recoverable	0.02	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Copper, Total Recoverable	0.071	0.001	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Copper, Total Recoverable	0.068	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Copper, Total Recoverable	0.024	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Copper, Total Recoverable	0.022	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Copper, Total Recoverable	0.018	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Copper, Total Recoverable	0.018	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Copper, Total Recoverable	0.098	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Copper, Total Recoverable	0.03	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Copper, Total Recoverable	0.022	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Copper, Total Recoverable	0.019	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Copper, Total Recoverable	0.018	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Copper, Total Recoverable	0.021	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Copper, Total Recoverable	0.011	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Copper, Total Recoverable	0.018	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Copper, Total Recoverable	0.012	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Copper, Total Recoverable	0.001	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Copper, Total Recoverable	0.003	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Copper, Total Recoverable	0.001	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Copper, Total Recoverable	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Copper, Total Recoverable	0.024	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Copper, Total Recoverable	0.016	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Copper, Total Recoverable	0.034	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Copper, Total Recoverable	0.023	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Copper, Total Recoverable	0.031	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Copper, Total Recoverable	0.023	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Copper, Total Recoverable	0.03	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Copper, Total Recoverable	0.023	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Copper, Total Recoverable	0.028	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Copper, Total Recoverable	0.025	0.001	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Copper, Total Recoverable	0.027	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Copper, Total Recoverable	0.022	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
QA Blank	Field Blank	H14030374-005	3/25/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
QA Blank	Field Blank	H14060106-008	6/2/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
QA Blank	Field Blank	H14060105-001	6/3/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
QA Blank	Field Blank	H14090234-013	9/9/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B

QA Blank	Field Blank	H14090234-005	9/10/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
QA Blank	Field Blank	H14120109-008	12/3/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
QA Blank	Field Blank	H14120110-001	12/4/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
SS-01	Natural Sample	H14030371-001	3/25/2014	Hardness as CaCO3	113	1	mg/L		A2340 B
SS-01	Natural Sample	H14060105-002	6/3/2014	Hardness as CaCO3	72	1	mg/L		A2340 B
SS-01	Duplicate	H14060105-003	6/3/2014	Hardness as CaCO3	79	1	mg/L		A2340 B
SS-01	Natural Sample	H14090233-001	9/11/2014	Hardness as CaCO3	119	1	mg/L		A2340 B
SS-01	Natural Sample	H14120110-002	12/4/2014	Hardness as CaCO3	118	1	mg/L		A2340 B
SS-01	Duplicate	H14120110-003	12/4/2014	Hardness as CaCO3	119	1	mg/L		A2340 B
SS-05A	Natural Sample	H14030371-002	3/25/2014	Hardness as CaCO3	125	1	mg/L		A2340 B
SS-05A	Natural Sample	H14060105-004	6/3/2014	Hardness as CaCO3	80	1	mg/L		A2340 B
SS-05A	Natural Sample	H14090233-002	9/11/2014	Hardness as CaCO3	129	1	mg/L		A2340 B
SS-05A	Natural Sample	H14120110-004	12/4/2014	Hardness as CaCO3	142	1	mg/L		A2340 B
SS-06G	Natural Sample	H14030374-001	3/25/2014	Hardness as CaCO3	177	1	mg/L		A2340 B
SS-06G	Natural Sample	H14060106-001	6/3/2014	Hardness as CaCO3	105	1	mg/L		A2340 B
SS-06G	Natural Sample	H14090234-001	9/11/2014	Hardness as CaCO3	189	1	mg/L		A2340 B
SS-06G	Natural Sample	H14120109-001	12/4/2014	Hardness as CaCO3	186	1	mg/L		A2340 B
SS-07	Natural Sample	H14030374-002	3/25/2014	Hardness as CaCO3	160	1	mg/L		A2340 B
SS-07	Natural Sample	H14060106-002	6/3/2014	Hardness as CaCO3	117	1	mg/L		A2340 B
SS-07	Natural Sample	H14090234-002	9/11/2014	Hardness as CaCO3	181	1	mg/L		A2340 B
SS-07	Natural Sample	H14120109-002	12/4/2014	Hardness as CaCO3	164	1	mg/L		A2340 B
SS-08	Duplicate	H14030374-004	3/25/2014	Hardness as CaCO3	159	1	mg/L		A2340 B
SS-08	Natural Sample	H14030374-003	3/25/2014	Hardness as CaCO3	160	1	mg/L		A2340 B
SS-08	Natural Sample	H14060106-003	6/3/2014	Hardness as CaCO3	122	1	mg/L		A2340 B
SS-08	Natural Sample	H14090234-003	9/10/2014	Hardness as CaCO3	170	1	mg/L		A2340 B
SS-08	Duplicate	H14090234-004	9/10/2014	Hardness as CaCO3	170	1	mg/L		A2340 B
SS-08	Natural Sample	H14120109-003	12/4/2014	Hardness as CaCO3	166	1	mg/L		A2340 B
SS-10A	Natural Sample	H14030374-006	3/25/2014	Hardness as CaCO3	168	1	mg/L		A2340 B
SS-10A	Natural Sample	H14060106-004	6/3/2014	Hardness as CaCO3	122	1	mg/L		A2340 B
SS-10A	Natural Sample	H14090234-006	9/10/2014	Hardness as CaCO3	180	1	mg/L		A2340 B
SS-10A	Natural Sample	H14120109-004	12/4/2014	Hardness as CaCO3	182	1	mg/L		A2340 B
SS-10B	Natural Sample	H14030374-007	3/25/2014	Hardness as CaCO3	168	1	mg/L		A2340 B
SS-10B	Natural Sample	H14060106-005	6/3/2014	Hardness as CaCO3	125	1	mg/L		A2340 B
SS-10B	Natural Sample	H14090234-007	9/10/2014	Hardness as CaCO3	175	1	mg/L		A2340 B
SS-10B	Natural Sample	H14120109-005	12/4/2014	Hardness as CaCO3	184	1	mg/L		A2340 B

SS-11C	Natural Sample	H14030374-008	3/25/2014	Hardness as CaCO3	200	1	mg/L		A2340 B
SS-11C	Natural Sample	H14060106-006	6/3/2014	Hardness as CaCO3	143	1	mg/L		A2340 B
SS-11C	Natural Sample	H14090234-008	9/10/2014	Hardness as CaCO3	196	1	mg/L		A2340 B
SS-11C	Natural Sample	H14120109-006	12/4/2014	Hardness as CaCO3	215	1	mg/L		A2340 B
SS-11D	Natural Sample	H14030374-009	3/25/2014	Hardness as CaCO3	187	1	mg/L		A2340 B
SS-11D	Natural Sample	H14060106-007	6/3/2014	Hardness as CaCO3	135	1	mg/L		A2340 B
SS-11D	Natural Sample	H14090234-009	9/10/2014	Hardness as CaCO3	193	1	mg/L		A2340 B
SS-11D	Natural Sample	H14120109-007	12/4/2014	Hardness as CaCO3	205	1	mg/L		A2340 B
SS-13	Natural Sample	H14030374-010	3/24/2014	Hardness as CaCO3	181	1	mg/L		A2340 B
SS-13	Duplicate	H14030374-011	3/24/2014	Hardness as CaCO3	181	1	mg/L		A2340 B
SS-13	Natural Sample	H14060106-009	6/2/2014	Hardness as CaCO3	133	1	mg/L		A2340 B
SS-13	Duplicate	H14060106-010	6/2/2014	Hardness as CaCO3	132	1	mg/L		A2340 B
SS-13	Natural Sample	H14090234-010	9/10/2014	Hardness as CaCO3	194	1	mg/L		A2340 B
SS-13	Natural Sample	H14120109-009	12/3/2014	Hardness as CaCO3	206	1	mg/L		A2340 B
SS-13	Duplicate	H14120109-010	12/3/2014	Hardness as CaCO3	204	1	mg/L		A2340 B
SS-14	Natural Sample	H14030374-013	3/24/2014	Hardness as CaCO3	184	1	mg/L		A2340 B
SS-14	Natural Sample	H14060106-011	6/2/2014	Hardness as CaCO3	133	1	mg/L		A2340 B
SS-14	Natural Sample	H14090234-011	9/9/2014	Hardness as CaCO3	190	1	mg/L		A2340 B
SS-14	Duplicate	H14090234-012	9/9/2014	Hardness as CaCO3	189	1	mg/L		A2340 B
SS-14	Natural Sample	H14120109-011	12/3/2014	Hardness as CaCO3	208	1	mg/L		A2340 B
SS-15A	Natural Sample	H14030374-014	3/24/2014	Hardness as CaCO3	185	1	mg/L		A2340 B
SS-15A	Natural Sample	H14060106-012	6/2/2014	Hardness as CaCO3	135	1	mg/L		A2340 B
SS-15A	Natural Sample	H14090234-014	9/9/2014	Hardness as CaCO3	192	1	mg/L		A2340 B
SS-15A	Natural Sample	H14120109-012	12/3/2014	Hardness as CaCO3	208	1	mg/L		A2340 B
SS-15B	Natural Sample	H14030374-015	3/24/2014	Hardness as CaCO3	164	1	mg/L		A2340 B
SS-15B	Natural Sample	H14060106-013	6/2/2014	Hardness as CaCO3	106	1	mg/L		A2340 B
SS-15B	Natural Sample	H14090234-015	9/9/2014	Hardness as CaCO3	181	1	mg/L		A2340 B
SS-15B	Natural Sample	H14120109-013	12/3/2014	Hardness as CaCO3	180	1	mg/L		A2340 B
SS-15G	Natural Sample	H14030371-003	3/24/2014	Hardness as CaCO3	106	1	mg/L		A2340 B
SS-15G	Natural Sample	H14060105-005	6/2/2014	Hardness as CaCO3	87	1	mg/L		A2340 B
SS-15G	Natural Sample	H14090233-003	9/9/2014	Hardness as CaCO3	128	1	mg/L		A2340 B
SS-15G	Natural Sample	H14120110-005	12/3/2014	Hardness as CaCO3	115	1	mg/L		A2340 B
SS-16B	Natural Sample	H14030374-016	3/24/2014	Hardness as CaCO3	176	1	mg/L		A2340 B
SS-16B	Natural Sample	H14060106-014	6/2/2014	Hardness as CaCO3	105	1	mg/L		A2340 B
SS-16B	Natural Sample	H14090234-016	9/9/2014	Hardness as CaCO3	180	1	mg/L		A2340 B

SS-16B	Natural Sample	H14120109-014	12/3/2014	Hardness as CaCO3	185	1	mg/L		A2340 B
SS-17D	Natural Sample	H14030374-017	3/24/2014	Hardness as CaCO3	174	1	mg/L		A2340 B
SS-17D	Natural Sample	H14060106-015	6/2/2014	Hardness as CaCO3	104	1	mg/L		A2340 B
SS-17D	Natural Sample	H14090234-017	9/9/2014	Hardness as CaCO3	180	1	mg/L		A2340 B
SS-17D	Natural Sample	H14120109-015	12/3/2014	Hardness as CaCO3	194	1	mg/L		A2340 B
SS-19	Natural Sample	H14030374-018	3/24/2014	Hardness as CaCO3	173	1	mg/L		A2340 B
SS-19	Natural Sample	H14060106-016	6/2/2014	Hardness as CaCO3	110	1	mg/L		A2340 B
SS-19	Natural Sample	H14090234-018	9/9/2014	Hardness as CaCO3	182	1	mg/L		A2340 B
SS-19	Natural Sample	H14120109-016	12/3/2014	Hardness as CaCO3	194	1	mg/L		A2340 B
QA Blank	Field Blank	H14030374-012	3/24/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Iron, Dissolved	0.15	0.02	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Iron, Dissolved	0.34	0.02	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Iron, Dissolved	0.32	0.02	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Iron, Dissolved	0.12	0.02	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Iron, Dissolved	0.17	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Iron, Dissolved	0.28	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Iron, Dissolved	0.1	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Iron, Dissolved	0.22	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Iron, Dissolved	0.12	0.02	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Iron, Dissolved	0.2	0.02	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Iron, Dissolved	0.14	0.02	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Iron, Dissolved	0.17	0.02	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Iron, Dissolved	0.19	0.02	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Iron, Dissolved	0.19	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Iron, Dissolved	0.06	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Iron, Dissolved	0.19	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Iron, Dissolved	0.06	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Iron, Dissolved	0.11	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Iron, Dissolved	0.16	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Iron, Dissolved	0.1	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Iron, Dissolved	0.15	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Iron, Dissolved	0.09	0.02	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Iron, Dissolved	0.1	0.02	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Iron, Dissolved	0.09	0.02	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Iron, Dissolved	0.02	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Iron, Dissolved	0.09	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Iron, Dissolved	0.05	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Iron, Dissolved	0.07	0.02	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Iron, Total Recoverable	ND	0.02	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Iron, Total Recoverable	0.04	0.02	mg/L	B	E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Iron, Total Recoverable	0.41	0.02	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Iron, Total Recoverable	0.86	0.02	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Iron, Total Recoverable	0.86	0.02	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Iron, Total Recoverable	0.35	0.02	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Iron, Total Recoverable	0.43	0.02	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Iron, Total Recoverable	0.43	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Iron, Total Recoverable	0.41	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Iron, Total Recoverable	1.02	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Iron, Total Recoverable	0.43	0.02	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Iron, Total Recoverable	0.81	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Iron, Total Recoverable	0.37	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Iron, Total Recoverable	1.02	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Iron, Total Recoverable	0.35	0.02	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Iron, Total Recoverable	0.58	0.02	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Iron, Total Recoverable	0.3	0.02	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Iron, Total Recoverable	0.77	0.02	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Iron, Total Recoverable	0.29	0.02	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Iron, Total Recoverable	0.39	0.02	mg/L	B	E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Iron, Total Recoverable	0.39	0.02	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Iron, Total Recoverable	0.39	0.02	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Iron, Total Recoverable	0.89	0.02	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Iron, Total Recoverable	0.33	0.02	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Iron, Total Recoverable	0.34	0.02	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Iron, Total Recoverable	0.76	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Iron, Total Recoverable	0.41	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Iron, Total Recoverable	0.74	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Iron, Total Recoverable	0.18	0.02	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Iron, Total Recoverable	0.84	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Iron, Total Recoverable	0.4	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Iron, Total Recoverable	0.72	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Iron, Total Recoverable	0.16	0.02	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Iron, Total Recoverable	0.76	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Iron, Total Recoverable	0.36	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Iron, Total Recoverable	0.56	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Iron, Total Recoverable	0.18	0.02	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Iron, Total Recoverable	0.70	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Iron, Total Recoverable	0.32	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Iron, Total Recoverable	0.51	0.02	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Iron, Total Recoverable	0.16	0.02	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Iron, Total Recoverable	0.75	0.02	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Iron, Total Recoverable	0.56	0.02	mg/L	J	E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Iron, Total Recoverable	0.42	0.02	mg/L	J	E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Iron, Total Recoverable	0.56	0.02	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Iron, Total Recoverable	0.44	0.02	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Iron, Total Recoverable	0.18	0.02	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Iron, Total Recoverable	1.64	0.02	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Iron, Total Recoverable	1.52	0.02	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Iron, Total Recoverable	0.62	0.02	mg/L	J	E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Iron, Total Recoverable	0.55	0.02	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Iron, Total Recoverable	0.19	0.02	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Iron, Total Recoverable	0.19	0.02	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Iron, Total Recoverable	2.38	0.02	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Iron, Total Recoverable	0.57	0.02	mg/L	J	E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Iron, Total Recoverable	0.49	0.02	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Iron, Total Recoverable	0.18	0.02	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Iron, Total Recoverable	0.29	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Iron, Total Recoverable	0.40	0.02	mg/L	J	E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Iron, Total Recoverable	0.3	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Iron, Total Recoverable	0.2	0.02	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Iron, Total Recoverable	0.16	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Iron, Total Recoverable	0.16	0.02	mg/L	J	E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Iron, Total Recoverable	0.22	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Iron, Total Recoverable	0.04	0.02	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Iron, Total Recoverable	0.08	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Iron, Total Recoverable	0.39	0.02	mg/L	J	E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Iron, Total Recoverable	0.39	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Iron, Total Recoverable	0.58	0.02	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Iron, Total Recoverable	0.19	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Iron, Total Recoverable	0.46	0.02	mg/L	J	E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Iron, Total Recoverable	0.57	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Iron, Total Recoverable	0.49	0.02	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Iron, Total Recoverable	0.19	0.02	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Iron, Total Recoverable	0.44	0.02	mg/L	J	E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Iron, Total Recoverable	0.56	0.02	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Iron, Total Recoverable	0.45	0.02	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Iron, Total Recoverable	0.19	0.02	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Lead, Dissolved	0.0007	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Lead, Dissolved	0.0006	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Lead, Dissolved	0.0005	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Lead, Total Recoverable	0.0005	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Lead, Total Recoverable	0.0008	0.0003	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Lead, Total Recoverable	0.0008	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Lead, Total Recoverable	0.0004	0.0003	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Lead, Total Recoverable	0.0005	0.0003	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Lead, Total Recoverable	0.0005	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Lead, Total Recoverable	0.0013	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Lead, Total Recoverable	0.0045	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Lead, Total Recoverable	0.0022	0.0003	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Lead, Total Recoverable	0.0039	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Lead, Total Recoverable	0.0014	0.0003	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Lead, Total Recoverable	0.0058	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Lead, Total Recoverable	0.0032	0.0003	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Lead, Total Recoverable	0.003	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Lead, Total Recoverable	0.0014	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Lead, Total Recoverable	0.0037	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Lead, Total Recoverable	0.0026	0.0003	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Lead, Total Recoverable	0.0021	0.0003	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Lead, Total Recoverable	0.0023	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Lead, Total Recoverable	0.0023	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Lead, Total Recoverable	0.0059	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Lead, Total Recoverable	0.0029	0.0003	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Lead, Total Recoverable	0.0029	0.0003	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Lead, Total Recoverable	0.0059	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Lead, Total Recoverable	0.0024	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Lead, Total Recoverable	0.0038	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Lead, Total Recoverable	0.0014	0.0003	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Lead, Total Recoverable	0.0065	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Lead, Total Recoverable	0.0024	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Lead, Total Recoverable	0.0041	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Lead, Total Recoverable	0.0014	0.0003	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Lead, Total Recoverable	0.0057	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Lead, Total Recoverable	0.0018	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Lead, Total Recoverable	0.0029	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Lead, Total Recoverable	0.0012	0.0003	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Lead, Total Recoverable	0.0054	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Lead, Total Recoverable	0.0016	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Lead, Total Recoverable	0.0027	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Lead, Total Recoverable	0.0011	0.0003	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Lead, Total Recoverable	0.0054	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Lead, Total Recoverable	0.0034	0.0003	mg/L	J	E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Lead, Total Recoverable	0.0021	0.0003	mg/L	J	E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Lead, Total Recoverable	0.0031	0.0003	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Lead, Total Recoverable	0.0028	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Lead, Total Recoverable	0.0011	0.0003	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Lead, Total Recoverable	0.012	0.0003	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Lead, Total Recoverable	0.0111	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Lead, Total Recoverable	0.0031	0.0003	mg/L	J	E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Lead, Total Recoverable	0.0037	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Lead, Total Recoverable	0.0011	0.0003	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Lead, Total Recoverable	0.0011	0.0003	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Lead, Total Recoverable	0.0178	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Lead, Total Recoverable	0.0043	0.0003	mg/L	J	E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Lead, Total Recoverable	0.0033	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Lead, Total Recoverable	0.0015	0.0003	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Lead, Total Recoverable	0.0015	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Lead, Total Recoverable	0.0028	0.0003	mg/L	J	E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Lead, Total Recoverable	0.0016	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Lead, Total Recoverable	0.0016	0.0003	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Lead, Total Recoverable	0.0009	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Lead, Total Recoverable	0.0004	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Lead, Total Recoverable	ND	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Lead, Total Recoverable	0.0032	0.0003	mg/L	J	E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Lead, Total Recoverable	0.0032	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Lead, Total Recoverable	0.0063	0.0003	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Lead, Total Recoverable	0.0014	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Lead, Total Recoverable	0.0033	0.0003	mg/L	J	E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Lead, Total Recoverable	0.004	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Lead, Total Recoverable	0.0043	0.0003	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Lead, Total Recoverable	0.0012	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Lead, Total Recoverable	0.0030	0.0003	mg/L	J	E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Lead, Total Recoverable	0.0042	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Lead, Total Recoverable	0.0038	0.0003	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Lead, Total Recoverable	0.0011	0.0003	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Magnesium, Total Recoverable	ND	1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Magnesium, Total Recoverable	9	1	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Magnesium, Total Recoverable	9	1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Magnesium, Total Recoverable	9	1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Magnesium, Total Recoverable	10	1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Magnesium, Total Recoverable	7	1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Magnesium, Total Recoverable	9	1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Magnesium, Total Recoverable	11	1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Magnesium, Total Recoverable	14	1	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Magnesium, Total Recoverable	14	1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Magnesium, Total Recoverable	14	1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Magnesium, Total Recoverable	9	1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Magnesium, Total Recoverable	14	1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Magnesium, Total Recoverable	7	1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Magnesium, Total Recoverable	8	1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Magnesium, Total Recoverable	14	1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Magnesium, Total Recoverable	9	1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Magnesium, Total Recoverable	13	1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Magnesium, Total Recoverable	11	1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Magnesium, Total Recoverable	11	1	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Magnesium, Total Recoverable	4	1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Magnesium, Total Recoverable	7	1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Magnesium, Total Recoverable	6	1	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Magnesium, Total Recoverable	12	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Manganese, Dissolved	0.071	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Manganese, Dissolved	0.028	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Manganese, Dissolved	0.028	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Manganese, Dissolved	0.041	0.001	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Manganese, Dissolved	0.064	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Manganese, Dissolved	0.063	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Manganese, Dissolved	0.103	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Manganese, Dissolved	0.043	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Manganese, Dissolved	0.082	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Manganese, Dissolved	0.135	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Manganese, Dissolved	0.157	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Manganese, Dissolved	0.043	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Manganese, Dissolved	0.051	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Manganese, Dissolved	0.117	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Manganese, Dissolved	0.14	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Manganese, Dissolved	0.045	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Manganese, Dissolved	0.063	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Manganese, Dissolved	0.104	0.001	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Manganese, Dissolved	0.2	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Manganese, Dissolved	0.214	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Manganese, Dissolved	0.11	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Manganese, Dissolved	0.068	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Manganese, Dissolved	0.068	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Manganese, Dissolved	0.206	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Manganese, Dissolved	0.228	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Manganese, Dissolved	0.139	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Manganese, Dissolved	0.035	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Manganese, Dissolved	0.284	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Manganese, Dissolved	0.24	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Manganese, Dissolved	0.146	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Manganese, Dissolved	0.04	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Manganese, Dissolved	0.289	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Manganese, Dissolved	0.311	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Manganese, Dissolved	0.204	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Manganese, Dissolved	0.075	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Manganese, Dissolved	0.346	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Manganese, Dissolved	0.292	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Manganese, Dissolved	0.179	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Manganese, Dissolved	0.085	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Manganese, Dissolved	0.323	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Manganese, Dissolved	0.221	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Manganese, Dissolved	0.22	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Manganese, Dissolved	0.13	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Manganese, Dissolved	0.132	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Manganese, Dissolved	0.088	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Manganese, Dissolved	0.342	0.001	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Manganese, Dissolved	0.333	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Manganese, Dissolved	0.247	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Manganese, Dissolved	0.118	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Manganese, Dissolved	0.045	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Manganese, Dissolved	0.045	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Manganese, Dissolved	0.383	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Manganese, Dissolved	0.323	0.001	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Manganese, Dissolved	0.118	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Manganese, Dissolved	0.03	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Manganese, Dissolved	0.248	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Manganese, Dissolved	0.226	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Manganese, Dissolved	0.062	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Manganese, Dissolved	0.028	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Manganese, Dissolved	0.181	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Manganese, Dissolved	0.002	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Manganese, Dissolved	0.002	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Manganese, Dissolved	0.002	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Manganese, Dissolved	0.001	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Manganese, Dissolved	0.299	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Manganese, Dissolved	0.088	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Manganese, Dissolved	0.097	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Manganese, Dissolved	0.171	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Manganese, Dissolved	0.234	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Manganese, Dissolved	0.066	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Manganese, Dissolved	0.053	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Manganese, Dissolved	0.133	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Manganese, Dissolved	0.21	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Manganese, Dissolved	0.065	0.001	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Manganese, Dissolved	0.052	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Manganese, Dissolved	0.12	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Manganese, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Manganese, Total Recoverable	0.079	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Manganese, Total Recoverable	0.059	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Manganese, Total Recoverable	0.061	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Manganese, Total Recoverable	0.046	0.001	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Manganese, Total Recoverable	0.069	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Manganese, Total Recoverable	0.071	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Manganese, Total Recoverable	0.111	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Manganese, Total Recoverable	0.092	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Manganese, Total Recoverable	0.098	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Manganese, Total Recoverable	0.161	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Manganese, Total Recoverable	0.172	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Manganese, Total Recoverable	0.096	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Manganese, Total Recoverable	0.084	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Manganese, Total Recoverable	0.151	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Manganese, Total Recoverable	0.15	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Manganese, Total Recoverable	0.083	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Manganese, Total Recoverable	0.084	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Manganese, Total Recoverable	0.125	0.001	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Manganese, Total Recoverable	0.23	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Manganese, Total Recoverable	0.226	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Manganese, Total Recoverable	0.165	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Manganese, Total Recoverable	0.093	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Manganese, Total Recoverable	0.094	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Manganese, Total Recoverable	0.244	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Manganese, Total Recoverable	0.248	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Manganese, Total Recoverable	0.183	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Manganese, Total Recoverable	0.054	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Manganese, Total Recoverable	0.357	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Manganese, Total Recoverable	0.255	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Manganese, Total Recoverable	0.189	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Manganese, Total Recoverable	0.065	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Manganese, Total Recoverable	0.359	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Manganese, Total Recoverable	0.336	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Manganese, Total Recoverable	0.254	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Manganese, Total Recoverable	0.102	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Manganese, Total Recoverable	0.434	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Manganese, Total Recoverable	0.314	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Manganese, Total Recoverable	0.222	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Manganese, Total Recoverable	0.114	0.001	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Manganese, Total Recoverable	0.417	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Manganese, Total Recoverable	0.265	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Manganese, Total Recoverable	0.247	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Manganese, Total Recoverable	0.182	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Manganese, Total Recoverable	0.168	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Manganese, Total Recoverable	0.127	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Manganese, Total Recoverable	0.584	0.001	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Manganese, Total Recoverable	0.555	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Manganese, Total Recoverable	0.29	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Manganese, Total Recoverable	0.192	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Manganese, Total Recoverable	0.081	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Manganese, Total Recoverable	0.082	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Manganese, Total Recoverable	0.763	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Manganese, Total Recoverable	0.376	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Manganese, Total Recoverable	0.195	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Manganese, Total Recoverable	0.073	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Manganese, Total Recoverable	0.28	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Manganese, Total Recoverable	0.254	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Manganese, Total Recoverable	0.092	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Manganese, Total Recoverable	0.071	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Manganese, Total Recoverable	0.199	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Manganese, Total Recoverable	0.011	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Manganese, Total Recoverable	0.01	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Manganese, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Manganese, Total Recoverable	0.004	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Manganese, Total Recoverable	0.323	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Manganese, Total Recoverable	0.114	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Manganese, Total Recoverable	0.144	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Manganese, Total Recoverable	0.186	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Manganese, Total Recoverable	0.259	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Manganese, Total Recoverable	0.122	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Manganese, Total Recoverable	0.118	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Manganese, Total Recoverable	0.148	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Manganese, Total Recoverable	0.237	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Manganese, Total Recoverable	0.123	0.001	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Manganese, Total Recoverable	0.119	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Manganese, Total Recoverable	0.135	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14030374-005	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14060106-008	6/2/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14060105-001	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14090234-013	9/9/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14090234-005	9/10/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14120109-008	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14120110-001	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14030371-001	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14060105-002	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-01	Duplicate	H14060105-003	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14090233-001	9/11/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14120110-002	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-01	Duplicate	H14120110-003	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14030371-002	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14060105-004	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14090233-002	9/11/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14120110-004	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14030374-001	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14060106-001	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14090234-001	9/11/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14120109-001	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14030374-002	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14060106-002	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14090234-002	9/11/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14120109-002	12/4/2014	Mercury, Dissolved	0.000013	0.000005	mg/L		E245.1
SS-08	Duplicate	H14030374-004	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14030374-003	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14060106-003	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14090234-003	9/10/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-08	Duplicate	H14090234-004	9/10/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14120109-003	12/4/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14030374-006	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

SS-10A	Natural Sample	H14060106-004	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14090234-006	9/10/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14120109-004	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14030374-007	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14060106-005	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14090234-007	9/10/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14120109-005	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14030374-008	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14060106-006	6/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14090234-008	9/10/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14120109-006	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14030374-009	3/25/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14060106-007	6/3/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14090234-009	9/10/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14120109-007	12/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14030374-010	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-13	Duplicate	H14030374-011	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14060106-009	6/2/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-13	Duplicate	H14060106-010	6/2/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14090234-010	9/10/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14120109-009	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-13	Duplicate	H14120109-010	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14030374-013	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14060106-011	6/2/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14090234-011	9/9/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-14	Duplicate	H14090234-012	9/9/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14120109-011	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14030374-014	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14060106-012	6/2/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14090234-014	9/9/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14120109-012	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14030374-015	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14060106-013	6/2/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14090234-015	9/9/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14120109-013	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

SS-15G	Natural Sample	H14030371-003	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14060105-005	6/2/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14090233-003	9/9/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14120110-005	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14030374-016	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14060106-014	6/2/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14090234-016	9/9/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14120109-014	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14030374-017	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14060106-015	6/2/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14090234-017	9/9/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14120109-015	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14030374-018	3/24/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14060106-016	6/2/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14090234-018	9/9/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14120109-016	12/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14030374-012	3/24/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14030374-005	3/25/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14060106-008	6/2/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14060105-001	6/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14090234-013	9/9/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14090234-005	9/10/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14120109-008	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14120110-001	12/4/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14030371-001	3/25/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14060105-002	6/3/2014	Mercury, Total Recoverable	0.000009	0.000005	mg/L		E245.1
SS-01	Duplicate	H14060105-003	6/3/2014	Mercury, Total Recoverable	0.000008	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14090233-001	9/11/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-01	Natural Sample	H14120110-002	12/4/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-01	Duplicate	H14120110-003	12/4/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14030371-002	3/25/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14060105-004	6/3/2014	Mercury, Total Recoverable	0.000029	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14090233-002	9/11/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-05A	Natural Sample	H14120110-004	12/4/2014	Mercury, Total Recoverable	0.000009	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14030374-001	3/25/2014	Mercury, Total Recoverable	0.000005	0.000005	mg/L		E245.1

SS-06G	Natural Sample	H14060106-001	6/3/2014	Mercury, Total Recoverable	0.000027	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14090234-001	9/11/2014	Mercury, Total Recoverable	0.000027	0.000005	mg/L		E245.1
SS-06G	Natural Sample	H14120109-001	12/4/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14030374-002	3/25/2014	Mercury, Total Recoverable	0.000006	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14060106-002	6/3/2014	Mercury, Total Recoverable	0.000022	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14090234-002	9/11/2014	Mercury, Total Recoverable	0.000015	0.000005	mg/L		E245.1
SS-07	Natural Sample	H14120109-002	12/4/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-08	Duplicate	H14030374-004	3/25/2014	Mercury, Total Recoverable	0.000009	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14030374-003	3/25/2014	Mercury, Total Recoverable	0.000011	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14060106-003	6/3/2014	Mercury, Total Recoverable	0.000029	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14090234-003	9/10/2014	Mercury, Total Recoverable	0.000025	0.000005	mg/L		E245.1
SS-08	Duplicate	H14090234-004	9/10/2014	Mercury, Total Recoverable	0.000016	0.000005	mg/L		E245.1
SS-08	Natural Sample	H14120109-003	12/4/2014	Mercury, Total Recoverable	0.000025	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14030374-006	3/25/2014	Mercury, Total Recoverable	0.000014	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14060106-004	6/3/2014	Mercury, Total Recoverable	0.000016	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14090234-006	9/10/2014	Mercury, Total Recoverable	0.000014	0.000005	mg/L		E245.1
SS-10A	Natural Sample	H14120109-004	12/4/2014	Mercury, Total Recoverable	0.000036	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14030374-007	3/25/2014	Mercury, Total Recoverable	0.000012	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14060106-005	6/3/2014	Mercury, Total Recoverable	0.000021	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14090234-007	9/10/2014	Mercury, Total Recoverable	0.000014	0.000005	mg/L		E245.1
SS-10B	Natural Sample	H14120109-005	12/4/2014	Mercury, Total Recoverable	0.000026	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14030374-008	3/25/2014	Mercury, Total Recoverable	0.000009	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14060106-006	6/3/2014	Mercury, Total Recoverable	0.000018	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14090234-008	9/10/2014	Mercury, Total Recoverable	0.000012	0.000005	mg/L		E245.1
SS-11C	Natural Sample	H14120109-006	12/4/2014	Mercury, Total Recoverable	0.000034	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14030374-009	3/25/2014	Mercury, Total Recoverable	0.00001	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14060106-007	6/3/2014	Mercury, Total Recoverable	0.000018	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14090234-009	9/10/2014	Mercury, Total Recoverable	0.000013	0.000005	mg/L		E245.1
SS-11D	Natural Sample	H14120109-007	12/4/2014	Mercury, Total Recoverable	0.000028	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14030374-010	3/24/2014	Mercury, Total Recoverable	0.000014	0.000005	mg/L		E245.1
SS-13	Duplicate	H14030374-011	3/24/2014	Mercury, Total Recoverable	0.000009	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14060106-009	6/2/2014	Mercury, Total Recoverable	0.000017	0.000005	mg/L		E245.1
SS-13	Duplicate	H14060106-010	6/2/2014	Mercury, Total Recoverable	0.000018	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14090234-010	9/10/2014	Mercury, Total Recoverable	0.000011	0.000005	mg/L		E245.1
SS-13	Natural Sample	H14120109-009	12/3/2014	Mercury, Total Recoverable	0.000086	0.000005	mg/L	J	E245.1

SS-13	Duplicate	H14120109-010	12/3/2014	Mercury, Total Recoverable	0.000055	0.000005	mg/L	J	E245.1
SS-14	Natural Sample	H14030374-013	3/24/2014	Mercury, Total Recoverable	0.000018	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14060106-011	6/2/2014	Mercury, Total Recoverable	0.000027	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14090234-011	9/9/2014	Mercury, Total Recoverable	0.000012	0.000005	mg/L		E245.1
SS-14	Duplicate	H14090234-012	9/9/2014	Mercury, Total Recoverable	0.000011	0.000005	mg/L		E245.1
SS-14	Natural Sample	H14120109-011	12/3/2014	Mercury, Total Recoverable	0.000360	0.000005	mg/L	J	E245.1
SS-15A	Natural Sample	H14030374-014	3/24/2014	Mercury, Total Recoverable	0.000018	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14060106-012	6/2/2014	Mercury, Total Recoverable	0.000021	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14090234-014	9/9/2014	Mercury, Total Recoverable	0.000015	0.000005	mg/L		E245.1
SS-15A	Natural Sample	H14120109-012	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14030374-015	3/24/2014	Mercury, Total Recoverable	0.00001	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14060106-013	6/2/2014	Mercury, Total Recoverable	0.000013	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14090234-015	9/9/2014	Mercury, Total Recoverable	0.000013	0.000005	mg/L		E245.1
SS-15B	Natural Sample	H14120109-013	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14030371-003	3/24/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14060105-005	6/2/2014	Mercury, Total Recoverable	0.000042	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14090233-003	9/9/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-15G	Natural Sample	H14120110-005	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14030374-016	3/24/2014	Mercury, Total Recoverable	0.000017	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14060106-014	6/2/2014	Mercury, Total Recoverable	0.000023	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14090234-016	9/9/2014	Mercury, Total Recoverable	0.000063	0.000005	mg/L		E245.1
SS-16B	Natural Sample	H14120109-014	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14030374-017	3/24/2014	Mercury, Total Recoverable	0.000019	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14060106-015	6/2/2014	Mercury, Total Recoverable	0.000032	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14090234-017	9/9/2014	Mercury, Total Recoverable	0.00004	0.000005	mg/L		E245.1
SS-17D	Natural Sample	H14120109-015	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14030374-018	3/24/2014	Mercury, Total Recoverable	0.000017	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14060106-016	6/2/2014	Mercury, Total Recoverable	0.000038	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14090234-018	9/9/2014	Mercury, Total Recoverable	0.000036	0.000005	mg/L		E245.1
SS-19	Natural Sample	H14120109-016	12/3/2014	Mercury, Total Recoverable	ND	0.000005	mg/L		E245.1
QA Blank	Field Blank	H14030374-012	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Molybdenum, Total Recoverable	0.006	0.005	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Molybdenum, Total Recoverable	0.005	0.005	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Molybdenum, Total Recoverable	ND	0.005	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Nickel, Total Recoverable	0.01	0.002	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Nickel, Total Recoverable	ND	0.002	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14030374-005	3/25/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14060106-008	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14060105-001	6/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14090234-013	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14090234-005	9/10/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14120109-008	12/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
QA Blank	Field Blank	H14120110-001	12/4/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-01	Natural Sample	H14030371-001	3/25/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-01	Natural Sample	H14060105-002	6/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-01	Duplicate	H14060105-003	6/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-01	Natural Sample	H14090233-001	9/11/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-01	Natural Sample	H14120110-002	12/4/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-01	Duplicate	H14120110-003	12/4/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-05A	Natural Sample	H14030371-002	3/25/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-05A	Natural Sample	H14060105-004	6/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-05A	Natural Sample	H14090233-002	9/11/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-05A	Natural Sample	H14120110-004	12/4/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-06G	Natural Sample	H14030374-001	3/25/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1

SS-06G	Natural Sample	H14060106-001	6/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-06G	Natural Sample	H14090234-001	9/11/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-06G	Natural Sample	H14120109-001	12/4/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-07	Natural Sample	H14030374-002	3/25/2014	Nitrogen, Ammonia	6.2	0.05	mg/L		E350.1
SS-07	Natural Sample	H14060106-002	6/3/2014	Nitrogen, Ammonia	3	0.05	mg/L		E350.1
SS-07	Natural Sample	H14090234-002	9/11/2014	Nitrogen, Ammonia	0.83	0.05	mg/L		E350.1
SS-07	Natural Sample	H14120109-002	12/4/2014	Nitrogen, Ammonia	7	0.05	mg/L		E350.1
SS-08	Duplicate	H14030374-004	3/25/2014	Nitrogen, Ammonia	4.2	0.05	mg/L		E350.1
SS-08	Natural Sample	H14030374-003	3/25/2014	Nitrogen, Ammonia	3.9	0.05	mg/L		E350.1
SS-08	Natural Sample	H14060106-003	6/3/2014	Nitrogen, Ammonia	2.6	0.05	mg/L		E350.1
SS-08	Natural Sample	H14090234-003	9/10/2014	Nitrogen, Ammonia	0.13	0.05	mg/L		E350.1
SS-08	Duplicate	H14090234-004	9/10/2014	Nitrogen, Ammonia	0.13	0.05	mg/L		E350.1
SS-08	Natural Sample	H14120109-003	12/4/2014	Nitrogen, Ammonia	5	0.05	mg/L		E350.1
SS-10A	Natural Sample	H14030374-006	3/25/2014	Nitrogen, Ammonia	1.62	0.05	mg/L		E350.1
SS-10A	Natural Sample	H14060106-004	6/3/2014	Nitrogen, Ammonia	0.69	0.05	mg/L		E350.1
SS-10A	Natural Sample	H14090234-006	9/10/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-10A	Natural Sample	H14120109-004	12/4/2014	Nitrogen, Ammonia	1.69	0.05	mg/L		E350.1
SS-10B	Natural Sample	H14030374-007	3/25/2014	Nitrogen, Ammonia	1.64	0.05	mg/L		E350.1
SS-10B	Natural Sample	H14060106-005	6/3/2014	Nitrogen, Ammonia	0.54	0.05	mg/L		E350.1
SS-10B	Natural Sample	H14090234-007	9/10/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-10B	Natural Sample	H14120109-005	12/4/2014	Nitrogen, Ammonia	1.88	0.05	mg/L		E350.1
SS-11C	Natural Sample	H14030374-008	3/25/2014	Nitrogen, Ammonia	2.1	0.05	mg/L		E350.1
SS-11C	Natural Sample	H14060106-006	6/3/2014	Nitrogen, Ammonia	0.63	0.05	mg/L		E350.1
SS-11C	Natural Sample	H14090234-008	9/10/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-11C	Natural Sample	H14120109-006	12/4/2014	Nitrogen, Ammonia	3.5	0.05	mg/L		E350.1
SS-11D	Natural Sample	H14030374-009	3/25/2014	Nitrogen, Ammonia	2.1	0.05	mg/L		E350.1
SS-11D	Natural Sample	H14060106-007	6/3/2014	Nitrogen, Ammonia	0.56	0.05	mg/L		E350.1
SS-11D	Natural Sample	H14090234-009	9/10/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-11D	Natural Sample	H14120109-007	12/4/2014	Nitrogen, Ammonia	3.2	0.05	mg/L		E350.1
SS-13	Natural Sample	H14030374-010	3/24/2014	Nitrogen, Ammonia	0.8	0.05	mg/L		E350.1
SS-13	Duplicate	H14030374-011	3/24/2014	Nitrogen, Ammonia	0.8	0.05	mg/L		E350.1
SS-13	Natural Sample	H14060106-009	6/2/2014	Nitrogen, Ammonia	0.12	0.05	mg/L		E350.1
SS-13	Duplicate	H14060106-010	6/2/2014	Nitrogen, Ammonia	0.11	0.05	mg/L		E350.1
SS-13	Natural Sample	H14090234-010	9/10/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-13	Natural Sample	H14120109-009	12/3/2014	Nitrogen, Ammonia	1.45	0.05	mg/L		E350.1

SS-13	Duplicate	H14120109-010	12/3/2014	Nitrogen, Ammonia	1.51	0.05	mg/L		E350.1
SS-14	Natural Sample	H14030374-013	3/24/2014	Nitrogen, Ammonia	0.96	0.05	mg/L		E350.1
SS-14	Natural Sample	H14060106-011	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-14	Natural Sample	H14090234-011	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-14	Duplicate	H14090234-012	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-14	Natural Sample	H14120109-011	12/3/2014	Nitrogen, Ammonia	1.52	0.05	mg/L		E350.1
SS-15A	Natural Sample	H14030374-014	3/24/2014	Nitrogen, Ammonia	1.44	0.05	mg/L		E350.1
SS-15A	Natural Sample	H14060106-012	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15A	Natural Sample	H14090234-014	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15A	Natural Sample	H14120109-012	12/3/2014	Nitrogen, Ammonia	2.7	0.05	mg/L		E350.1
SS-15B	Natural Sample	H14030374-015	3/24/2014	Nitrogen, Ammonia	1	0.05	mg/L		E350.1
SS-15B	Natural Sample	H14060106-013	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15B	Natural Sample	H14090234-015	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15B	Natural Sample	H14120109-013	12/3/2014	Nitrogen, Ammonia	1.6	0.05	mg/L		E350.1
SS-15G	Natural Sample	H14030371-003	3/24/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15G	Natural Sample	H14060105-005	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15G	Natural Sample	H14090233-003	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-15G	Natural Sample	H14120110-005	12/3/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-16B	Natural Sample	H14030374-016	3/24/2014	Nitrogen, Ammonia	0.99	0.05	mg/L		E350.1
SS-16B	Natural Sample	H14060106-014	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-16B	Natural Sample	H14090234-016	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-16B	Natural Sample	H14120109-014	12/3/2014	Nitrogen, Ammonia	1.32	0.05	mg/L		E350.1
SS-17D	Natural Sample	H14030374-017	3/24/2014	Nitrogen, Ammonia	0.33	0.05	mg/L		E350.1
SS-17D	Natural Sample	H14060106-015	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-17D	Natural Sample	H14090234-017	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-17D	Natural Sample	H14120109-015	12/3/2014	Nitrogen, Ammonia	1.03	0.05	mg/L		E350.1
SS-19	Natural Sample	H14030374-018	3/24/2014	Nitrogen, Ammonia	0.34	0.05	mg/L		E350.1
SS-19	Natural Sample	H14060106-016	6/2/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-19	Natural Sample	H14090234-018	9/9/2014	Nitrogen, Ammonia	ND	0.05	mg/L		E350.1
SS-19	Natural Sample	H14120109-016	12/3/2014	Nitrogen, Ammonia	0.96	0.05	mg/L		E350.1
QA Blank	Field Blank	H14030374-012	3/24/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
QA Blank	Field Blank	H14030374-005	3/25/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
QA Blank	Field Blank	H14060106-008	6/2/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
QA Blank	Field Blank	H14060105-001	6/3/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
QA Blank	Field Blank	H14090234-013	9/9/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2

QA Blank	Field Blank	H14090234-005	9/10/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
QA Blank	Field Blank	H14120109-008	12/3/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
QA Blank	Field Blank	H14120110-001	12/4/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
SS-01	Natural Sample	H14030371-001	3/25/2014	NO3+NO2 as N	0.79	0.05	mg/L		E353.2
SS-01	Natural Sample	H14060105-002	6/3/2014	NO3+NO2 as N	0.12	0.05	mg/L		E353.2
SS-01	Duplicate	H14060105-003	6/3/2014	NO3+NO2 as N	0.12	0.05	mg/L		E353.2
SS-01	Natural Sample	H14090233-001	9/11/2014	NO3+NO2 as N	0.98	0.05	mg/L		E353.2
SS-01	Natural Sample	H14120110-002	12/4/2014	NO3+NO2 as N	1.2	0.05	mg/L		E353.2
SS-01	Duplicate	H14120110-003	12/4/2014	NO3+NO2 as N	1.19	0.05	mg/L		E353.2
SS-05A	Natural Sample	H14030371-002	3/25/2014	NO3+NO2 as N	0.93	0.05	mg/L		E353.2
SS-05A	Natural Sample	H14060105-004	6/3/2014	NO3+NO2 as N	0.15	0.05	mg/L		E353.2
SS-05A	Natural Sample	H14090233-002	9/11/2014	NO3+NO2 as N	1.02	0.05	mg/L		E353.2
SS-05A	Natural Sample	H14120110-004	12/4/2014	NO3+NO2 as N	1.26	0.05	mg/L		E353.2
SS-06G	Natural Sample	H14030374-001	3/25/2014	NO3+NO2 as N	1.06	0.05	mg/L		E353.2
SS-06G	Natural Sample	H14060106-001	6/3/2014	NO3+NO2 as N	0.24	0.05	mg/L		E353.2
SS-06G	Natural Sample	H14090234-001	9/11/2014	NO3+NO2 as N	1.13	0.05	mg/L		E353.2
SS-06G	Natural Sample	H14120109-001	12/4/2014	NO3+NO2 as N	1.54	0.05	mg/L		E353.2
SS-07	Natural Sample	H14030374-002	3/25/2014	NO3+NO2 as N	0.84	0.05	mg/L		E353.2
SS-07	Natural Sample	H14060106-002	6/3/2014	NO3+NO2 as N	0.29	0.05	mg/L		E353.2
SS-07	Natural Sample	H14090234-002	9/11/2014	NO3+NO2 as N	1.68	0.05	mg/L		E353.2
SS-07	Natural Sample	H14120109-002	12/4/2014	NO3+NO2 as N	1.31	0.05	mg/L		E353.2
SS-08	Duplicate	H14030374-004	3/25/2014	NO3+NO2 as N	1.25	0.05	mg/L		E353.2
SS-08	Natural Sample	H14030374-003	3/25/2014	NO3+NO2 as N	1.25	0.05	mg/L		E353.2
SS-08	Natural Sample	H14060106-003	6/3/2014	NO3+NO2 as N	1.1	0.05	mg/L		E353.2
SS-08	Natural Sample	H14090234-003	9/10/2014	NO3+NO2 as N	3.93	0.05	mg/L		E353.2
SS-08	Duplicate	H14090234-004	9/10/2014	NO3+NO2 as N	3.86	0.05	mg/L		E353.2
SS-08	Natural Sample	H14120109-003	12/4/2014	NO3+NO2 as N	1.72	0.05	mg/L		E353.2
SS-10A	Natural Sample	H14030374-006	3/25/2014	NO3+NO2 as N	1.49	0.05	mg/L		E353.2
SS-10A	Natural Sample	H14060106-004	6/3/2014	NO3+NO2 as N	1.54	0.05	mg/L		E353.2
SS-10A	Natural Sample	H14090234-006	9/10/2014	NO3+NO2 as N	2.94	0.05	mg/L		E353.2
SS-10A	Natural Sample	H14120109-004	12/4/2014	NO3+NO2 as N	2.29	0.05	mg/L		E353.2
SS-10B	Natural Sample	H14030374-007	3/25/2014	NO3+NO2 as N	1.47	0.05	mg/L		E353.2
SS-10B	Natural Sample	H14060106-005	6/3/2014	NO3+NO2 as N	1.46	0.05	mg/L		E353.2
SS-10B	Natural Sample	H14090234-007	9/10/2014	NO3+NO2 as N	2.92	0.05	mg/L		E353.2
SS-10B	Natural Sample	H14120109-005	12/4/2014	NO3+NO2 as N	2.11	0.05	mg/L		E353.2

SS-11C	Natural Sample	H14030374-008	3/25/2014	NO3+NO2 as N	1.29	0.05	mg/L		E353.2
SS-11C	Natural Sample	H14060106-006	6/3/2014	NO3+NO2 as N	1.47	0.05	mg/L		E353.2
SS-11C	Natural Sample	H14090234-008	9/10/2014	NO3+NO2 as N	2.93	0.05	mg/L		E353.2
SS-11C	Natural Sample	H14120109-006	12/4/2014	NO3+NO2 as N	1.81	0.05	mg/L		E353.2
SS-11D	Natural Sample	H14030374-009	3/25/2014	NO3+NO2 as N	1.21	0.05	mg/L		E353.2
SS-11D	Natural Sample	H14060106-007	6/3/2014	NO3+NO2 as N	1.09	0.05	mg/L		E353.2
SS-11D	Natural Sample	H14090234-009	9/10/2014	NO3+NO2 as N	2.71	0.05	mg/L		E353.2
SS-11D	Natural Sample	H14120109-007	12/4/2014	NO3+NO2 as N	1.73	0.05	mg/L		E353.2
SS-13	Natural Sample	H14030374-010	3/24/2014	NO3+NO2 as N	1.33	0.05	mg/L		E353.2
SS-13	Duplicate	H14030374-011	3/24/2014	NO3+NO2 as N	1.32	0.05	mg/L		E353.2
SS-13	Natural Sample	H14060106-009	6/2/2014	NO3+NO2 as N	1.37	0.05	mg/L		E353.2
SS-13	Duplicate	H14060106-010	6/2/2014	NO3+NO2 as N	1.37	0.05	mg/L		E353.2
SS-13	Natural Sample	H14090234-010	9/10/2014	NO3+NO2 as N	2.76	0.05	mg/L		E353.2
SS-13	Natural Sample	H14120109-009	12/3/2014	NO3+NO2 as N	1.69	0.05	mg/L		E353.2
SS-13	Duplicate	H14120109-010	12/3/2014	NO3+NO2 as N	1.68	0.05	mg/L		E353.2
SS-14	Natural Sample	H14030374-013	3/24/2014	NO3+NO2 as N	1.3	0.05	mg/L		E353.2
SS-14	Natural Sample	H14060106-011	6/2/2014	NO3+NO2 as N	1.02	0.05	mg/L		E353.2
SS-14	Natural Sample	H14090234-011	9/9/2014	NO3+NO2 as N	2.06	0.05	mg/L		E353.2
SS-14	Duplicate	H14090234-012	9/9/2014	NO3+NO2 as N	2.12	0.05	mg/L		E353.2
SS-14	Natural Sample	H14120109-011	12/3/2014	NO3+NO2 as N	1.61	0.05	mg/L		E353.2
SS-15A	Natural Sample	H14030374-014	3/24/2014	NO3+NO2 as N	1.31	0.05	mg/L		E353.2
SS-15A	Natural Sample	H14060106-012	6/2/2014	NO3+NO2 as N	0.85	0.05	mg/L		E353.2
SS-15A	Natural Sample	H14090234-014	9/9/2014	NO3+NO2 as N	2.41	0.05	mg/L		E353.2
SS-15A	Natural Sample	H14120109-012	12/3/2014	NO3+NO2 as N	1.79	0.05	mg/L		E353.2
SS-15B	Natural Sample	H14030374-015	3/24/2014	NO3+NO2 as N	0.94	0.05	mg/L		E353.2
SS-15B	Natural Sample	H14060106-013	6/2/2014	NO3+NO2 as N	0.38	0.05	mg/L		E353.2
SS-15B	Natural Sample	H14090234-015	9/9/2014	NO3+NO2 as N	2.13	0.05	mg/L		E353.2
SS-15B	Natural Sample	H14120109-013	12/3/2014	NO3+NO2 as N	1.36	0.05	mg/L		E353.2
SS-15G	Natural Sample	H14030371-003	3/24/2014	NO3+NO2 as N	0.08	0.05	mg/L		E353.2
SS-15G	Natural Sample	H14060105-005	6/2/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
SS-15G	Natural Sample	H14090233-003	9/9/2014	NO3+NO2 as N	ND	0.05	mg/L		E353.2
SS-15G	Natural Sample	H14120110-005	12/3/2014	NO3+NO2 as N	0.11	0.05	mg/L		E353.2
SS-16B	Natural Sample	H14030374-016	3/24/2014	NO3+NO2 as N	1.3	0.05	mg/L		E353.2
SS-16B	Natural Sample	H14060106-014	6/2/2014	NO3+NO2 as N	0.39	0.05	mg/L		E353.2
SS-16B	Natural Sample	H14090234-016	9/9/2014	NO3+NO2 as N	2.04	0.05	mg/L		E353.2

SS-16B	Natural Sample	H14120109-014	12/3/2014	NO3+NO2 as N	1.48	0.05	mg/L		E353.2
SS-17D	Natural Sample	H14030374-017	3/24/2014	NO3+NO2 as N	1.28	0.05	mg/L		E353.2
SS-17D	Natural Sample	H14060106-015	6/2/2014	NO3+NO2 as N	0.4	0.05	mg/L		E353.2
SS-17D	Natural Sample	H14090234-017	9/9/2014	NO3+NO2 as N	1.36	0.05	mg/L		E353.2
SS-17D	Natural Sample	H14120109-015	12/3/2014	NO3+NO2 as N	1.43	0.05	mg/L		E353.2
SS-19	Natural Sample	H14030374-018	3/24/2014	NO3+NO2 as N	1.21	0.05	mg/L		E353.2
SS-19	Natural Sample	H14060106-016	6/2/2014	NO3+NO2 as N	0.46	0.05	mg/L		E353.2
SS-19	Natural Sample	H14090234-018	9/9/2014	NO3+NO2 as N	1.69	0.05	mg/L		E353.2
SS-19	Natural Sample	H14120109-016	12/3/2014	NO3+NO2 as N	1.38	0.05	mg/L		E353.2
QA Blank	Field Blank	H14030374-012	3/24/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14030374-005	3/25/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14060106-008	6/2/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14060105-001	6/3/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14090234-013	9/9/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14090234-005	9/10/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14120109-008	12/3/2014	N-Total	ND	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14120110-001	12/4/2014	N-Total	ND	0.05	mg/L		A4500 N-C
SS-01	Natural Sample	H14030371-001	3/25/2014	N-Total	1.18	0.05	mg/L		A4500 N-C
SS-01	Natural Sample	H14060105-002	6/3/2014	N-Total	0.5	0.05	mg/L		A4500 N-C
SS-01	Duplicate	H14060105-003	6/3/2014	N-Total	0.54	0.05	mg/L		A4500 N-C
SS-01	Natural Sample	H14090233-001	9/11/2014	N-Total	0.92	0.05	mg/L	J	A4500 N-C
SS-01	Natural Sample	H14120110-002	12/4/2014	N-Total	1.29	0.05	mg/L		A4500 N-C
SS-01	Duplicate	H14120110-003	12/4/2014	N-Total	1.26	0.05	mg/L		A4500 N-C
SS-05A	Natural Sample	H14030371-002	3/25/2014	N-Total	1.29	0.05	mg/L		A4500 N-C
SS-05A	Natural Sample	H14060105-004	6/3/2014	N-Total	0.73	0.05	mg/L		A4500 N-C
SS-05A	Natural Sample	H14090233-002	9/11/2014	N-Total	1.86	0.05	mg/L	J	A4500 N-C
SS-05A	Natural Sample	H14120110-004	12/4/2014	N-Total	1.57	0.05	mg/L		A4500 N-C
SS-06G	Natural Sample	H14030374-001	3/25/2014	N-Total	1.42	0.05	mg/L		A4500 N-C
SS-06G	Natural Sample	H14060106-001	6/3/2014	N-Total	0.85	0.05	mg/L		A4500 N-C
SS-06G	Natural Sample	H14090234-001	9/11/2014	N-Total	1.98	0.05	mg/L	J	A4500 N-C
SS-06G	Natural Sample	H14120109-001	12/4/2014	N-Total	1.66	0.05	mg/L		A4500 N-C
SS-07	Natural Sample	H14030374-002	3/25/2014	N-Total	8.1	0.05	mg/L		A4500 N-C
SS-07	Natural Sample	H14060106-002	6/3/2014	N-Total	4.3	0.05	mg/L		A4500 N-C
SS-07	Natural Sample	H14090234-002	9/11/2014	N-Total	3.38	0.05	mg/L	J	A4500 N-C
SS-07	Natural Sample	H14120109-002	12/4/2014	N-Total	8.6	0.05	mg/L		A4500 N-C

SS-08	Duplicate	H14030374-004	3/25/2014	N-Total	7.4	0.05	mg/L		A4500 N-C
SS-08	Natural Sample	H14030374-003	3/25/2014	N-Total	7.4	0.05	mg/L		A4500 N-C
SS-08	Natural Sample	H14060106-003	6/3/2014	N-Total	5.1	0.05	mg/L		A4500 N-C
SS-08	Natural Sample	H14090234-003	9/10/2014	N-Total	7.0	0.05	mg/L	J	A4500 N-C
SS-08	Duplicate	H14090234-004	9/10/2014	N-Total	5.1	0.05	mg/L	J	A4500 N-C
SS-08	Natural Sample	H14120109-003	12/4/2014	N-Total	7	0.05	mg/L		A4500 N-C
SS-10A	Natural Sample	H14030374-006	3/25/2014	N-Total	3.98	0.05	mg/L		A4500 N-C
SS-10A	Natural Sample	H14060106-004	6/3/2014	N-Total	3.23	0.05	mg/L		A4500 N-C
SS-10A	Natural Sample	H14090234-006	9/10/2014	N-Total	3.1	0.05	mg/L	J	A4500 N-C
SS-10A	Natural Sample	H14120109-004	12/4/2014	N-Total	4.8	0.05	mg/L		A4500 N-C
SS-10B	Natural Sample	H14030374-007	3/25/2014	N-Total	3.81	0.05	mg/L		A4500 N-C
SS-10B	Natural Sample	H14060106-005	6/3/2014	N-Total	2.96	0.05	mg/L		A4500 N-C
SS-10B	Natural Sample	H14090234-007	9/10/2014	N-Total	3.56	0.05	mg/L	J	A4500 N-C
SS-10B	Natural Sample	H14120109-005	12/4/2014	N-Total	4.8	0.05	mg/L		A4500 N-C
SS-11C	Natural Sample	H14030374-008	3/25/2014	N-Total	2.15	0.05	mg/L		A4500 N-C
SS-11C	Natural Sample	H14060106-006	6/3/2014	N-Total	2.5	0.05	mg/L		A4500 N-C
SS-11C	Natural Sample	H14090234-008	9/10/2014	N-Total	3.73	0.05	mg/L	J	A4500 N-C
SS-11C	Natural Sample	H14120109-006	12/4/2014	N-Total	6	0.05	mg/L		A4500 N-C
SS-11D	Natural Sample	H14030374-009	3/25/2014	N-Total	3.87	0.05	mg/L		A4500 N-C
SS-11D	Natural Sample	H14060106-007	6/3/2014	N-Total	2.41	0.05	mg/L		A4500 N-C
SS-11D	Natural Sample	H14090234-009	9/10/2014	N-Total	3.51	0.05	mg/L	J	A4500 N-C
SS-11D	Natural Sample	H14120109-007	12/4/2014	N-Total	5.2	0.05	mg/L		A4500 N-C
SS-13	Natural Sample	H14030374-010	3/24/2014	N-Total	2.74	0.05	mg/L		A4500 N-C
SS-13	Duplicate	H14030374-011	3/24/2014	N-Total	2.68	0.05	mg/L		A4500 N-C
SS-13	Natural Sample	H14060106-009	6/2/2014	N-Total	1.12	0.05	mg/L		A4500 N-C
SS-13	Duplicate	H14060106-010	6/2/2014	N-Total	1.14	0.05	mg/L		A4500 N-C
SS-13	Natural Sample	H14090234-010	9/10/2014	N-Total	3.51	0.05	mg/L	J	A4500 N-C
SS-13	Natural Sample	H14120109-009	12/3/2014	N-Total	4.6	0.05	mg/L		A4500 N-C
SS-13	Duplicate	H14120109-010	12/3/2014	N-Total	4.6	0.05	mg/L		A4500 N-C
SS-14	Natural Sample	H14030374-013	3/24/2014	N-Total	2.95	0.05	mg/L		A4500 N-C
SS-14	Natural Sample	H14060106-011	6/2/2014	N-Total	0.88	0.05	mg/L		A4500 N-C
SS-14	Natural Sample	H14090234-011	9/9/2014	N-Total	2.76	0.05	mg/L		A4500 N-C
SS-14	Duplicate	H14090234-012	9/9/2014	N-Total	2.79	0.05	mg/L		A4500 N-C
SS-14	Natural Sample	H14120109-011	12/3/2014	N-Total	4.5	0.05	mg/L		A4500 N-C
SS-15A	Natural Sample	H14030374-014	3/24/2014	N-Total	3.57	0.05	mg/L		A4500 N-C

SS-15A	Natural Sample	H14060106-012	6/2/2014	N-Total	0.78	0.05	mg/L		A4500 N-C
SS-15A	Natural Sample	H14090234-014	9/9/2014	N-Total	1.53	0.05	mg/L		A4500 N-C
SS-15A	Natural Sample	H14120109-012	12/3/2014	N-Total	5.2	0.05	mg/L		A4500 N-C
SS-15B	Natural Sample	H14030374-015	3/24/2014	N-Total	2.55	0.05	mg/L		A4500 N-C
SS-15B	Natural Sample	H14060106-013	6/2/2014	N-Total	0.35	0.05	mg/L		A4500 N-C
SS-15B	Natural Sample	H14090234-015	9/9/2014	N-Total	6.5	0.05	mg/L		A4500 N-C
SS-15B	Natural Sample	H14120109-013	12/3/2014	N-Total	3.7	0.05	mg/L		A4500 N-C
SS-15G	Natural Sample	H14030371-003	3/24/2014	N-Total	0.17	0.05	mg/L		A4500 N-C
SS-15G	Natural Sample	H14060105-005	6/2/2014	N-Total	0.22	0.05	mg/L		A4500 N-C
SS-15G	Natural Sample	H14090233-003	9/9/2014	N-Total	0.51	0.05	mg/L		A4500 N-C
SS-15G	Natural Sample	H14120110-005	12/3/2014	N-Total	ND	0.05	mg/L		A4500 N-C
SS-16B	Natural Sample	H14030374-016	3/24/2014	N-Total	2.94	0.05	mg/L		A4500 N-C
SS-16B	Natural Sample	H14060106-014	6/2/2014	N-Total	0.9	0.05	mg/L		A4500 N-C
SS-16B	Natural Sample	H14090234-016	9/9/2014	N-Total	6.4	0.05	mg/L		A4500 N-C
SS-16B	Natural Sample	H14120109-014	12/3/2014	N-Total	3.7	0.05	mg/L		A4500 N-C
SS-17D	Natural Sample	H14030374-017	3/24/2014	N-Total	2.21	0.05	mg/L		A4500 N-C
SS-17D	Natural Sample	H14060106-015	6/2/2014	N-Total	0.89	0.05	mg/L		A4500 N-C
SS-17D	Natural Sample	H14090234-017	9/9/2014	N-Total	5.3	0.05	mg/L		A4500 N-C
SS-17D	Natural Sample	H14120109-015	12/3/2014	N-Total	3.1	0.05	mg/L		A4500 N-C
SS-19	Natural Sample	H14030374-018	3/24/2014	N-Total	2.04	0.05	mg/L		A4500 N-C
SS-19	Natural Sample	H14060106-016	6/2/2014	N-Total	0.98	0.05	mg/L		A4500 N-C
SS-19	Natural Sample	H14090234-018	9/9/2014	N-Total	5.4	0.05	mg/L		A4500 N-C
SS-19	Natural Sample	H14120109-016	12/3/2014	N-Total	2.87	0.05	mg/L		A4500 N-C
QA Blank	Field Blank	H14030374-012	3/24/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14030374-005	3/25/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14060106-008	6/2/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14060105-001	6/3/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14090234-013	9/9/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14090234-005	9/10/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14120109-008	12/3/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
QA Blank	Field Blank	H14120110-001	12/4/2014	Phosphorus, Total as P	ND	0.005	mg/L		E365.1
SS-01	Natural Sample	H14030371-001	3/25/2014	Phosphorus, Total as P	0.111	0.005	mg/L		E365.1
SS-01	Natural Sample	H14060105-002	6/3/2014	Phosphorus, Total as P	0.115	0.005	mg/L		E365.1
SS-01	Duplicate	H14060105-003	6/3/2014	Phosphorus, Total as P	0.109	0.005	mg/L		E365.1
SS-01	Natural Sample	H14090233-001	9/11/2014	Phosphorus, Total as P	0.079	0.005	mg/L		E365.1

SS-01	Natural Sample	H14120110-002	12/4/2014	Phosphorus, Total as P	0.083	0.005	mg/L		E365.1
SS-01	Duplicate	H14120110-003	12/4/2014	Phosphorus, Total as P	0.084	0.005	mg/L		E365.1
SS-05A	Natural Sample	H14030371-002	3/25/2014	Phosphorus, Total as P	0.091	0.005	mg/L		E365.1
SS-05A	Natural Sample	H14060105-004	6/3/2014	Phosphorus, Total as P	0.139	0.005	mg/L		E365.1
SS-05A	Natural Sample	H14090233-002	9/11/2014	Phosphorus, Total as P	0.067	0.005	mg/L		E365.1
SS-05A	Natural Sample	H14120110-004	12/4/2014	Phosphorus, Total as P	0.121	0.005	mg/L		E365.1
SS-06G	Natural Sample	H14030374-001	3/25/2014	Phosphorus, Total as P	0.077	0.005	mg/L		E365.1
SS-06G	Natural Sample	H14060106-001	6/3/2014	Phosphorus, Total as P	0.106	0.005	mg/L		E365.1
SS-06G	Natural Sample	H14090234-001	9/11/2014	Phosphorus, Total as P	0.046	0.005	mg/L		E365.1
SS-06G	Natural Sample	H14120109-001	12/4/2014	Phosphorus, Total as P	0.092	0.005	mg/L		E365.1
SS-07	Natural Sample	H14030374-002	3/25/2014	Phosphorus, Total as P	0.725	0.005	mg/L		E365.1
SS-07	Natural Sample	H14060106-002	6/3/2014	Phosphorus, Total as P	0.435	0.005	mg/L		E365.1
SS-07	Natural Sample	H14090234-002	9/11/2014	Phosphorus, Total as P	0.16	0.005	mg/L		E365.1
SS-07	Natural Sample	H14120109-002	12/4/2014	Phosphorus, Total as P	0.378	0.005	mg/L		E365.1
SS-08	Duplicate	H14030374-004	3/25/2014	Phosphorus, Total as P	0.526	0.005	mg/L		E365.1
SS-08	Natural Sample	H14030374-003	3/25/2014	Phosphorus, Total as P	0.45	0.005	mg/L		E365.1
SS-08	Natural Sample	H14060106-003	6/3/2014	Phosphorus, Total as P	0.485	0.005	mg/L		E365.1
SS-08	Natural Sample	H14090234-003	9/10/2014	Phosphorus, Total as P	0.35	0.005	mg/L		E365.1
SS-08	Duplicate	H14090234-004	9/10/2014	Phosphorus, Total as P	0.31	0.005	mg/L		E365.1
SS-08	Natural Sample	H14120109-003	12/4/2014	Phosphorus, Total as P	0.355	0.005	mg/L		E365.1
SS-10A	Natural Sample	H14030374-006	3/25/2014	Phosphorus, Total as P	0.367	0.005	mg/L		E365.1
SS-10A	Natural Sample	H14060106-004	6/3/2014	Phosphorus, Total as P	0.375	0.005	mg/L		E365.1
SS-10A	Natural Sample	H14090234-006	9/10/2014	Phosphorus, Total as P	0.269	0.005	mg/L		E365.1
SS-10A	Natural Sample	H14120109-004	12/4/2014	Phosphorus, Total as P	0.413	0.005	mg/L		E365.1
SS-10B	Natural Sample	H14030374-007	3/25/2014	Phosphorus, Total as P	0.342	0.005	mg/L		E365.1
SS-10B	Natural Sample	H14060106-005	6/3/2014	Phosphorus, Total as P	0.368	0.005	mg/L		E365.1
SS-10B	Natural Sample	H14090234-007	9/10/2014	Phosphorus, Total as P	0.283	0.005	mg/L		E365.1
SS-10B	Natural Sample	H14120109-005	12/4/2014	Phosphorus, Total as P	0.437	0.005	mg/L		E365.1
SS-11C	Natural Sample	H14030374-008	3/25/2014	Phosphorus, Total as P	0.353	0.005	mg/L		E365.1
SS-11C	Natural Sample	H14060106-006	6/3/2014	Phosphorus, Total as P	0.377	0.005	mg/L		E365.1
SS-11C	Natural Sample	H14090234-008	9/10/2014	Phosphorus, Total as P	0.287	0.005	mg/L		E365.1
SS-11C	Natural Sample	H14120109-006	12/4/2014	Phosphorus, Total as P	0.535	0.005	mg/L		E365.1
SS-11D	Natural Sample	H14030374-009	3/25/2014	Phosphorus, Total as P	0.346	0.005	mg/L		E365.1
SS-11D	Natural Sample	H14060106-007	6/3/2014	Phosphorus, Total as P	0.36	0.005	mg/L		E365.1
SS-11D	Natural Sample	H14090234-009	9/10/2014	Phosphorus, Total as P	0.289	0.005	mg/L		E365.1

SS-11D	Natural Sample	H14120109-007	12/4/2014	Phosphorus, Total as P	0.236	0.005	mg/L		E365.1
SS-13	Natural Sample	H14030374-010	3/24/2014	Phosphorus, Total as P	0.325	0.005	mg/L		E365.1
SS-13	Duplicate	H14030374-011	3/24/2014	Phosphorus, Total as P	0.3	0.005	mg/L		E365.1
SS-13	Natural Sample	H14060106-009	6/2/2014	Phosphorus, Total as P	0.329	0.005	mg/L		E365.1
SS-13	Duplicate	H14060106-010	6/2/2014	Phosphorus, Total as P	0.324	0.005	mg/L		E365.1
SS-13	Natural Sample	H14090234-010	9/10/2014	Phosphorus, Total as P	0.288	0.005	mg/L		E365.1
SS-13	Natural Sample	H14120109-009	12/3/2014	Phosphorus, Total as P	0.477	0.005	mg/L		E365.1
SS-13	Duplicate	H14120109-010	12/3/2014	Phosphorus, Total as P	0.481	0.005	mg/L		E365.1
SS-14	Natural Sample	H14030374-013	3/24/2014	Phosphorus, Total as P	0.32	0.005	mg/L		E365.1
SS-14	Natural Sample	H14060106-011	6/2/2014	Phosphorus, Total as P	0.323	0.005	mg/L		E365.1
SS-14	Natural Sample	H14090234-011	9/9/2014	Phosphorus, Total as P	0.249	0.005	mg/L		E365.1
SS-14	Duplicate	H14090234-012	9/9/2014	Phosphorus, Total as P	0.251	0.005	mg/L		E365.1
SS-14	Natural Sample	H14120109-011	12/3/2014	Phosphorus, Total as P	0.648	0.005	mg/L		E365.1
SS-15A	Natural Sample	H14030374-014	3/24/2014	Phosphorus, Total as P	0.312	0.005	mg/L		E365.1
SS-15A	Natural Sample	H14060106-012	6/2/2014	Phosphorus, Total as P	0.303	0.005	mg/L		E365.1
SS-15A	Natural Sample	H14090234-014	9/9/2014	Phosphorus, Total as P	0.225	0.005	mg/L		E365.1
SS-15A	Natural Sample	H14120109-012	12/3/2014	Phosphorus, Total as P	0.351	0.005	mg/L		E365.1
SS-15B	Natural Sample	H14030374-015	3/24/2014	Phosphorus, Total as P	0.218	0.005	mg/L		E365.1
SS-15B	Natural Sample	H14060106-013	6/2/2014	Phosphorus, Total as P	0.126	0.005	mg/L		E365.1
SS-15B	Natural Sample	H14090234-015	9/9/2014	Phosphorus, Total as P	0.191	0.005	mg/L		E365.1
SS-15B	Natural Sample	H14120109-013	12/3/2014	Phosphorus, Total as P	0.286	0.005	mg/L		E365.1
SS-15G	Natural Sample	H14030371-003	3/24/2014	Phosphorus, Total as P	0.048	0.005	mg/L		E365.1
SS-15G	Natural Sample	H14060105-005	6/2/2014	Phosphorus, Total as P	0.022	0.005	mg/L		E365.1
SS-15G	Natural Sample	H14090233-003	9/9/2014	Phosphorus, Total as P	0.026	0.005	mg/L		E365.1
SS-15G	Natural Sample	H14120110-005	12/3/2014	Phosphorus, Total as P	0.037	0.005	mg/L		E365.1
SS-16B	Natural Sample	H14030374-016	3/24/2014	Phosphorus, Total as P	0.221	0.005	mg/L		E365.1
SS-16B	Natural Sample	H14060106-014	6/2/2014	Phosphorus, Total as P	0.13	0.005	mg/L		E365.1
SS-16B	Natural Sample	H14090234-016	9/9/2014	Phosphorus, Total as P	0.196	0.005	mg/L		E365.1
SS-16B	Natural Sample	H14120109-014	12/3/2014	Phosphorus, Total as P	0.225	0.005	mg/L		E365.1
SS-17D	Natural Sample	H14030374-017	3/24/2014	Phosphorus, Total as P	0.188	0.005	mg/L		E365.1
SS-17D	Natural Sample	H14060106-015	6/2/2014	Phosphorus, Total as P	0.148	0.005	mg/L		E365.1
SS-17D	Natural Sample	H14090234-017	9/9/2014	Phosphorus, Total as P	0.197	0.005	mg/L		E365.1
SS-17D	Natural Sample	H14120109-015	12/3/2014	Phosphorus, Total as P	0.198	0.005	mg/L		E365.1
SS-19	Natural Sample	H14030374-018	3/24/2014	Phosphorus, Total as P	0.186	0.005	mg/L		E365.1
SS-19	Natural Sample	H14060106-016	6/2/2014	Phosphorus, Total as P	0.154	0.005	mg/L		E365.1

SS-19	Natural Sample	H14090234-018	9/9/2014	Phosphorus, Total as P	0.174	0.005	mg/L		E365.1
SS-19	Natural Sample	H14120109-016	12/3/2014	Phosphorus, Total as P	0.191	0.005	mg/L		E365.1
QA Blank	Field Blank	H14030374-012	3/24/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Potassium, Total Recoverable	ND	1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Potassium, Total Recoverable	2	1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Potassium, Total Recoverable	2	1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Potassium, Total Recoverable	7	1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Potassium, Total Recoverable	7	1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Potassium, Total Recoverable	7	1	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Potassium, Total Recoverable	7	1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Potassium, Total Recoverable	7	1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Potassium, Total Recoverable	4	1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Potassium, Total Recoverable	7	1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Potassium, Total Recoverable	2	1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Potassium, Total Recoverable	2	1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Potassium, Total Recoverable	1	1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Potassium, Total Recoverable	1	1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Potassium, Total Recoverable	1	1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Potassium, Total Recoverable	3	1	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Potassium, Total Recoverable	6	1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Potassium, Total Recoverable	5	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Selenium, Total Recoverable	ND	0.001	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Silver, Total Recoverable	0.0003	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Silver, Total Recoverable	0.0002	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Silver, Total Recoverable	0.0003	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Silver, Total Recoverable	0.0002	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Silver, Total Recoverable	0.0002	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Silver, Total Recoverable	0.0005	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Silver, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Sodium, Total Recoverable	ND	1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Sodium, Total Recoverable	12	1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Sodium, Total Recoverable	8	1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Sodium, Total Recoverable	8	1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Sodium, Total Recoverable	12	1	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Sodium, Total Recoverable	13	1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Sodium, Total Recoverable	13	1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Sodium, Total Recoverable	16	1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Sodium, Total Recoverable	9	1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Sodium, Total Recoverable	16	1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Sodium, Total Recoverable	17	1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Sodium, Total Recoverable	22	1	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Sodium, Total Recoverable	13	1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Sodium, Total Recoverable	24	1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Sodium, Total Recoverable	22	1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Sodium, Total Recoverable	27	1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Sodium, Total Recoverable	15	1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Sodium, Total Recoverable	26	1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Sodium, Total Recoverable	27	1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Sodium, Total Recoverable	27	1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Sodium, Total Recoverable	27	1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Sodium, Total Recoverable	17	1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Sodium, Total Recoverable	29	1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Sodium, Total Recoverable	26	1	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Sodium, Total Recoverable	18	1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Sodium, Total Recoverable	29	1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Sodium, Total Recoverable	26	1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Sodium, Total Recoverable	17	1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Sodium, Total Recoverable	31	1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Sodium, Total Recoverable	29	1	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Sodium, Total Recoverable	32	1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Sodium, Total Recoverable	22	1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Sodium, Total Recoverable	37	1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Sodium, Total Recoverable	34	1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Sodium, Total Recoverable	31	1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Sodium, Total Recoverable	23	1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Sodium, Total Recoverable	37	1	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Sodium, Total Recoverable	33	1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Sodium, Total Recoverable	31	1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Sodium, Total Recoverable	24	1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Sodium, Total Recoverable	20	1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Sodium, Total Recoverable	37	1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Sodium, Total Recoverable	32	1	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Sodium, Total Recoverable	31	1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Sodium, Total Recoverable	24	1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Sodium, Total Recoverable	37	1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Sodium, Total Recoverable	37	1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Sodium, Total Recoverable	32	1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Sodium, Total Recoverable	31	1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Sodium, Total Recoverable	25	1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Sodium, Total Recoverable	36	1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Sodium, Total Recoverable	33	1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Sodium, Total Recoverable	23	1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Sodium, Total Recoverable	12	1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Sodium, Total Recoverable	25	1	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Sodium, Total Recoverable	5	1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Sodium, Total Recoverable	3	1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Sodium, Total Recoverable	4	1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Sodium, Total Recoverable	4	1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Sodium, Total Recoverable	28	1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Sodium, Total Recoverable	11	1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Sodium, Total Recoverable	30	1	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Sodium, Total Recoverable	26	1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Sodium, Total Recoverable	28	1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Sodium, Total Recoverable	11	1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Sodium, Total Recoverable	31	1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Sodium, Total Recoverable	27	1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Sodium, Total Recoverable	28	1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Sodium, Total Recoverable	12	1	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Sodium, Total Recoverable	32	1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Sodium, Total Recoverable	28	1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14030374-005	3/25/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14060106-008	6/2/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14060105-001	6/3/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14090234-013	9/9/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14090234-005	9/10/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14120109-008	12/3/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
QA Blank	Field Blank	H14120110-001	12/4/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
SS-01	Natural Sample	H14030371-001	3/25/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-01	Natural Sample	H14060105-002	6/3/2014	Solids, Total Suspended TSS @ 105 C	8	1	mg/L	J	A2540 D
SS-01	Duplicate	H14060105-003	6/3/2014	Solids, Total Suspended TSS @ 105 C	5	1	mg/L		A2540 D
SS-01	Natural Sample	H14090233-001	9/11/2014	Solids, Total Suspended TSS @ 105 C	3	1	mg/L		A2540 D
SS-01	Natural Sample	H14120110-002	12/4/2014	Solids, Total Suspended TSS @ 105 C	5	1	mg/L		A2540 D
SS-01	Duplicate	H14120110-003	12/4/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L		A2540 D
SS-05A	Natural Sample	H14030371-002	3/25/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-05A	Natural Sample	H14060105-004	6/3/2014	Solids, Total Suspended TSS @ 105 C	18	1	mg/L	J	A2540 D
SS-05A	Natural Sample	H14090233-002	9/11/2014	Solids, Total Suspended TSS @ 105 C	7	1	mg/L		A2540 D
SS-05A	Natural Sample	H14120110-004	12/4/2014	Solids, Total Suspended TSS @ 105 C	15	1	mg/L		A2540 D
SS-06G	Natural Sample	H14030374-001	3/25/2014	Solids, Total Suspended TSS @ 105 C	2	1	mg/L		A2540 D

SS-06G	Natural Sample	H14060106-001	6/3/2014	Solids, Total Suspended TSS @ 105 C	21	1	mg/L	J	A2540 D
SS-06G	Natural Sample	H14090234-001	9/11/2014	Solids, Total Suspended TSS @ 105 C	8	1	mg/L		A2540 D
SS-06G	Natural Sample	H14120109-001	12/4/2014	Solids, Total Suspended TSS @ 105 C	11	1	mg/L		A2540 D
SS-07	Natural Sample	H14030374-002	3/25/2014	Solids, Total Suspended TSS @ 105 C	2	1	mg/L		A2540 D
SS-07	Natural Sample	H14060106-002	6/3/2014	Solids, Total Suspended TSS @ 105 C	16	1	mg/L	J	A2540 D
SS-07	Natural Sample	H14090234-002	9/11/2014	Solids, Total Suspended TSS @ 105 C	7	1	mg/L		A2540 D
SS-07	Natural Sample	H14120109-002	12/4/2014	Solids, Total Suspended TSS @ 105 C	8	1	mg/L		A2540 D
SS-08	Duplicate	H14030374-004	3/25/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L	J	A2540 D
SS-08	Natural Sample	H14030374-003	3/25/2014	Solids, Total Suspended TSS @ 105 C	8	1	mg/L	J	A2540 D
SS-08	Natural Sample	H14060106-003	6/3/2014	Solids, Total Suspended TSS @ 105 C	18	1	mg/L	J	A2540 D
SS-08	Natural Sample	H14090234-003	9/10/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L		A2540 D
SS-08	Duplicate	H14090234-004	9/10/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L		A2540 D
SS-08	Natural Sample	H14120109-003	12/4/2014	Solids, Total Suspended TSS @ 105 C	20	1	mg/L		A2540 D
SS-10A	Natural Sample	H14030374-006	3/25/2014	Solids, Total Suspended TSS @ 105 C	10	1	mg/L	J	A2540 D
SS-10A	Natural Sample	H14060106-004	6/3/2014	Solids, Total Suspended TSS @ 105 C	ND	1	mg/L		A2540 D
SS-10A	Natural Sample	H14090234-006	9/10/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-10A	Natural Sample	H14120109-004	12/4/2014	Solids, Total Suspended TSS @ 105 C	22	1	mg/L		A2540 D
SS-10B	Natural Sample	H14030374-007	3/25/2014	Solids, Total Suspended TSS @ 105 C	9	1	mg/L	J	A2540 D
SS-10B	Natural Sample	H14060106-005	6/3/2014	Solids, Total Suspended TSS @ 105 C	10	1	mg/L	J	A2540 D
SS-10B	Natural Sample	H14090234-007	9/10/2014	Solids, Total Suspended TSS @ 105 C	5	1	mg/L		A2540 D
SS-10B	Natural Sample	H14120109-005	12/4/2014	Solids, Total Suspended TSS @ 105 C	20	1	mg/L		A2540 D
SS-11C	Natural Sample	H14030374-008	3/25/2014	Solids, Total Suspended TSS @ 105 C	7	1	mg/L	J	A2540 D
SS-11C	Natural Sample	H14060106-006	6/3/2014	Solids, Total Suspended TSS @ 105 C	11	1	mg/L	J	A2540 D
SS-11C	Natural Sample	H14090234-008	9/10/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L		A2540 D
SS-11C	Natural Sample	H14120109-006	12/4/2014	Solids, Total Suspended TSS @ 105 C	20	1	mg/L		A2540 D
SS-11D	Natural Sample	H14030374-009	3/25/2014	Solids, Total Suspended TSS @ 105 C	9	1	mg/L	J	A2540 D
SS-11D	Natural Sample	H14060106-007	6/3/2014	Solids, Total Suspended TSS @ 105 C	12	1	mg/L	J	A2540 D
SS-11D	Natural Sample	H14090234-009	9/10/2014	Solids, Total Suspended TSS @ 105 C	5	1	mg/L		A2540 D
SS-11D	Natural Sample	H14120109-007	12/4/2014	Solids, Total Suspended TSS @ 105 C	21	1	mg/L		A2540 D
SS-13	Natural Sample	H14030374-010	3/24/2014	Solids, Total Suspended TSS @ 105 C	18	1	mg/L		A2540 D
SS-13	Duplicate	H14030374-011	3/24/2014	Solids, Total Suspended TSS @ 105 C	11	1	mg/L		A2540 D
SS-13	Natural Sample	H14060106-009	6/2/2014	Solids, Total Suspended TSS @ 105 C	14	1	mg/L		A2540 D
SS-13	Duplicate	H14060106-010	6/2/2014	Solids, Total Suspended TSS @ 105 C	15	1	mg/L		A2540 D
SS-13	Natural Sample	H14090234-010	9/10/2014	Solids, Total Suspended TSS @ 105 C	5	1	mg/L		A2540 D
SS-13	Natural Sample	H14120109-009	12/3/2014	Solids, Total Suspended TSS @ 105 C	50	1	mg/L		A2540 D

SS-13	Duplicate	H14120109-010	12/3/2014	Solids, Total Suspended TSS @ 105 C	49	1	mg/L		A2540 D
SS-14	Natural Sample	H14030374-013	3/24/2014	Solids, Total Suspended TSS @ 105 C	22	1	mg/L		A2540 D
SS-14	Natural Sample	H14060106-011	6/2/2014	Solids, Total Suspended TSS @ 105 C	24	1	mg/L		A2540 D
SS-14	Natural Sample	H14090234-011	9/9/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-14	Duplicate	H14090234-012	9/9/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-14	Natural Sample	H14120109-011	12/3/2014	Solids, Total Suspended TSS @ 105 C	78	1	mg/L		A2540 D
SS-15A	Natural Sample	H14030374-014	3/24/2014	Solids, Total Suspended TSS @ 105 C	14	1	mg/L		A2540 D
SS-15A	Natural Sample	H14060106-012	6/2/2014	Solids, Total Suspended TSS @ 105 C	18	1	mg/L		A2540 D
SS-15A	Natural Sample	H14090234-014	9/9/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L		A2540 D
SS-15A	Natural Sample	H14120109-012	12/3/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-15B	Natural Sample	H14030374-015	3/24/2014	Solids, Total Suspended TSS @ 105 C	9	1	mg/L		A2540 D
SS-15B	Natural Sample	H14060106-013	6/2/2014	Solids, Total Suspended TSS @ 105 C	12	1	mg/L		A2540 D
SS-15B	Natural Sample	H14090234-015	9/9/2014	Solids, Total Suspended TSS @ 105 C	6	1	mg/L		A2540 D
SS-15B	Natural Sample	H14120109-013	12/3/2014	Solids, Total Suspended TSS @ 105 C	3	1	mg/L		A2540 D
SS-15G	Natural Sample	H14030371-003	3/24/2014	Solids, Total Suspended TSS @ 105 C	5	1	mg/L		A2540 D
SS-15G	Natural Sample	H14060105-005	6/2/2014	Solids, Total Suspended TSS @ 105 C	8	1	mg/L		A2540 D
SS-15G	Natural Sample	H14090233-003	9/9/2014	Solids, Total Suspended TSS @ 105 C	1	1	mg/L		A2540 D
SS-15G	Natural Sample	H14120110-005	12/3/2014	Solids, Total Suspended TSS @ 105 C	3	1	mg/L		A2540 D
SS-16B	Natural Sample	H14030374-016	3/24/2014	Solids, Total Suspended TSS @ 105 C	8	1	mg/L		A2540 D
SS-16B	Natural Sample	H14060106-014	6/2/2014	Solids, Total Suspended TSS @ 105 C	12	1	mg/L		A2540 D
SS-16B	Natural Sample	H14090234-016	9/9/2014	Solids, Total Suspended TSS @ 105 C	18	1	mg/L		A2540 D
SS-16B	Natural Sample	H14120109-014	12/3/2014	Solids, Total Suspended TSS @ 105 C	3	1	mg/L		A2540 D
SS-17D	Natural Sample	H14030374-017	3/24/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
SS-17D	Natural Sample	H14060106-015	6/2/2014	Solids, Total Suspended TSS @ 105 C	19	1	mg/L		A2540 D
SS-17D	Natural Sample	H14090234-017	9/9/2014	Solids, Total Suspended TSS @ 105 C	14	1	mg/L		A2540 D
SS-17D	Natural Sample	H14120109-015	12/3/2014	Solids, Total Suspended TSS @ 105 C	3	1	mg/L		A2540 D
SS-19	Natural Sample	H14030374-018	3/24/2014	Solids, Total Suspended TSS @ 105 C	10	1	mg/L		A2540 D
SS-19	Natural Sample	H14060106-016	6/2/2014	Solids, Total Suspended TSS @ 105 C	21	1	mg/L		A2540 D
SS-19	Natural Sample	H14090234-018	9/9/2014	Solids, Total Suspended TSS @ 105 C	13	1	mg/L		A2540 D
SS-19	Natural Sample	H14120109-016	12/3/2014	Solids, Total Suspended TSS @ 105 C	4	1	mg/L		A2540 D
QA Blank	Field Blank	H14030374-012	3/24/2014	Sulfate	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14030374-005	3/25/2014	Sulfate	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14060106-008	6/2/2014	Sulfate	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14060105-001	6/3/2014	Sulfate	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14090234-013	9/9/2014	Sulfate	ND	1	mg/L		E300.0

QA Blank	Field Blank	H14090234-005	9/10/2014	Sulfate	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14120109-008	12/3/2014	Sulfate	ND	1	mg/L		E300.0
QA Blank	Field Blank	H14120110-001	12/4/2014	Sulfate	ND	1	mg/L		E300.0
SS-01	Natural Sample	H14030371-001	3/25/2014	Sulfate	30	1	mg/L		E300.0
SS-01	Natural Sample	H14060105-002	6/3/2014	Sulfate	14	1	mg/L		E300.0
SS-01	Duplicate	H14060105-003	6/3/2014	Sulfate	14	1	mg/L		E300.0
SS-01	Natural Sample	H14090233-001	9/11/2014	Sulfate	23	1	mg/L		E300.0
SS-01	Natural Sample	H14120110-002	12/4/2014	Sulfate	24	1	mg/L		E300.0
SS-01	Duplicate	H14120110-003	12/4/2014	Sulfate	25	1	mg/L		E300.0
SS-05A	Natural Sample	H14030371-002	3/25/2014	Sulfate	38	1	mg/L		E300.0
SS-05A	Natural Sample	H14060105-004	6/3/2014	Sulfate	16	1	mg/L		E300.0
SS-05A	Natural Sample	H14090233-002	9/11/2014	Sulfate	28	1	mg/L		E300.0
SS-05A	Natural Sample	H14120110-004	12/4/2014	Sulfate	29	1	mg/L		E300.0
SS-06G	Natural Sample	H14030374-001	3/25/2014	Sulfate	96	1	mg/L		E300.0
SS-06G	Natural Sample	H14060106-001	6/3/2014	Sulfate	42	1	mg/L		E300.0
SS-06G	Natural Sample	H14090234-001	9/11/2014	Sulfate	100	1	mg/L		E300.0
SS-06G	Natural Sample	H14120109-001	12/4/2014	Sulfate	93	1	mg/L		E300.0
SS-07	Natural Sample	H14030374-002	3/25/2014	Sulfate	81	1	mg/L		E300.0
SS-07	Natural Sample	H14060106-002	6/3/2014	Sulfate	42	1	mg/L		E300.0
SS-07	Natural Sample	H14090234-002	9/11/2014	Sulfate	94	1	mg/L		E300.0
SS-07	Natural Sample	H14120109-002	12/4/2014	Sulfate	74	1	mg/L		E300.0
SS-08	Duplicate	H14030374-004	3/25/2014	Sulfate	85	1	mg/L		E300.0
SS-08	Natural Sample	H14030374-003	3/25/2014	Sulfate	89	1	mg/L		E300.0
SS-08	Natural Sample	H14060106-003	6/3/2014	Sulfate	46	1	mg/L		E300.0
SS-08	Natural Sample	H14090234-003	9/10/2014	Sulfate	86	1	mg/L		E300.0
SS-08	Duplicate	H14090234-004	9/10/2014	Sulfate	85	1	mg/L		E300.0
SS-08	Natural Sample	H14120109-003	12/4/2014	Sulfate	82	1	mg/L		E300.0
SS-10A	Natural Sample	H14030374-006	3/25/2014	Sulfate	93	1	mg/L		E300.0
SS-10A	Natural Sample	H14060106-004	6/3/2014	Sulfate	50	1	mg/L		E300.0
SS-10A	Natural Sample	H14090234-006	9/10/2014	Sulfate	96	1	mg/L		E300.0
SS-10A	Natural Sample	H14120109-004	12/4/2014	Sulfate	93	1	mg/L		E300.0
SS-10B	Natural Sample	H14030374-007	3/25/2014	Sulfate	96	1	mg/L		E300.0
SS-10B	Natural Sample	H14060106-005	6/3/2014	Sulfate	50	1	mg/L		E300.0
SS-10B	Natural Sample	H14090234-007	9/10/2014	Sulfate	95	1	mg/L		E300.0
SS-10B	Natural Sample	H14120109-005	12/4/2014	Sulfate	93	1	mg/L		E300.0

SS-11C	Natural Sample	H14030374-008	3/25/2014	Sulfate	99	1	mg/L		E300.0
SS-11C	Natural Sample	H14060106-006	6/3/2014	Sulfate	62	1	mg/L		E300.0
SS-11C	Natural Sample	H14090234-008	9/10/2014	Sulfate	100	1	mg/L		E300.0
SS-11C	Natural Sample	H14120109-006	12/4/2014	Sulfate	100	1	mg/L		E300.0
SS-11D	Natural Sample	H14030374-009	3/25/2014	Sulfate	92	1	mg/L		E300.0
SS-11D	Natural Sample	H14060106-007	6/3/2014	Sulfate	52	1	mg/L		E300.0
SS-11D	Natural Sample	H14090234-009	9/10/2014	Sulfate	99	1	mg/L		E300.0
SS-11D	Natural Sample	H14120109-007	12/4/2014	Sulfate	94	1	mg/L		E300.0
SS-13	Natural Sample	H14030374-010	3/24/2014	Sulfate	96	1	mg/L		E300.0
SS-13	Duplicate	H14030374-011	3/24/2014	Sulfate	91	1	mg/L		E300.0
SS-13	Natural Sample	H14060106-009	6/2/2014	Sulfate	52	1	mg/L		E300.0
SS-13	Duplicate	H14060106-010	6/2/2014	Sulfate	53	1	mg/L		E300.0
SS-13	Natural Sample	H14090234-010	9/10/2014	Sulfate	97	1	mg/L		E300.0
SS-13	Natural Sample	H14120109-009	12/3/2014	Sulfate	98	1	mg/L		E300.0
SS-13	Duplicate	H14120109-010	12/3/2014	Sulfate	99	1	mg/L		E300.0
SS-14	Natural Sample	H14030374-013	3/24/2014	Sulfate	100	1	mg/L		E300.0
SS-14	Natural Sample	H14060106-011	6/2/2014	Sulfate	54	1	mg/L		E300.0
SS-14	Natural Sample	H14090234-011	9/9/2014	Sulfate	100	1	mg/L		E300.0
SS-14	Duplicate	H14090234-012	9/9/2014	Sulfate	100	1	mg/L		E300.0
SS-14	Natural Sample	H14120109-011	12/3/2014	Sulfate	99	1	mg/L		E300.0
SS-15A	Natural Sample	H14030374-014	3/24/2014	Sulfate	99	1	mg/L		E300.0
SS-15A	Natural Sample	H14060106-012	6/2/2014	Sulfate	56	1	mg/L		E300.0
SS-15A	Natural Sample	H14090234-014	9/9/2014	Sulfate	98	1	mg/L		E300.0
SS-15A	Natural Sample	H14120109-012	12/3/2014	Sulfate	96	1	mg/L		E300.0
SS-15B	Natural Sample	H14030374-015	3/24/2014	Sulfate	76	1	mg/L		E300.0
SS-15B	Natural Sample	H14060106-013	6/2/2014	Sulfate	33	1	mg/L		E300.0
SS-15B	Natural Sample	H14090234-015	9/9/2014	Sulfate	85	1	mg/L		E300.0
SS-15B	Natural Sample	H14120109-013	12/3/2014	Sulfate	76	1	mg/L		E300.0
SS-15G	Natural Sample	H14030371-003	3/24/2014	Sulfate	37	1	mg/L		E300.0
SS-15G	Natural Sample	H14060105-005	6/2/2014	Sulfate	19	1	mg/L		E300.0
SS-15G	Natural Sample	H14090233-003	9/9/2014	Sulfate	22	1	mg/L		E300.0
SS-15G	Natural Sample	H14120110-005	12/3/2014	Sulfate	21	1	mg/L		E300.0
SS-16B	Natural Sample	H14030374-016	3/24/2014	Sulfate	90	1	mg/L		E300.0
SS-16B	Natural Sample	H14060106-014	6/2/2014	Sulfate	33	1	mg/L		E300.0
SS-16B	Natural Sample	H14090234-016	9/9/2014	Sulfate	86	1	mg/L		E300.0

SS-16B	Natural Sample	H14120109-014	12/3/2014	Sulfate	78	1	mg/L		E300.0
SS-17D	Natural Sample	H14030374-017	3/24/2014	Sulfate	96	1	mg/L		E300.0
SS-17D	Natural Sample	H14060106-015	6/2/2014	Sulfate	33	1	mg/L		E300.0
SS-17D	Natural Sample	H14090234-017	9/9/2014	Sulfate	94	1	mg/L		E300.0
SS-17D	Natural Sample	H14120109-015	12/3/2014	Sulfate	89	1	mg/L		E300.0
SS-19	Natural Sample	H14030374-018	3/24/2014	Sulfate	99	1	mg/L		E300.0
SS-19	Natural Sample	H14060106-016	6/2/2014	Sulfate	34	1	mg/L		E300.0
SS-19	Natural Sample	H14090234-018	9/9/2014	Sulfate	95	1	mg/L		E300.0
SS-19	Natural Sample	H14120109-016	12/3/2014	Sulfate	90	1	mg/L		E300.0
QA Blank	Field Blank	H14030374-012	3/24/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Uranium, Dissolved	0.0037	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Uranium, Dissolved	0.0012	0.0002	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Uranium, Dissolved	0.0012	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Uranium, Dissolved	0.0037	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Uranium, Dissolved	0.003	0.0002	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Uranium, Dissolved	0.003	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Uranium, Dissolved	0.0053	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Uranium, Dissolved	0.0019	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Uranium, Dissolved	0.0039	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Uranium, Dissolved	0.0037	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Uranium, Dissolved	0.0065	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Uranium, Dissolved	0.0024	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Uranium, Dissolved	0.0044	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Uranium, Dissolved	0.0049	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Uranium, Dissolved	0.0055	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Uranium, Dissolved	0.0025	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Uranium, Dissolved	0.004	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Uranium, Dissolved	0.0041	0.0002	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Uranium, Dissolved	0.0056	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Uranium, Dissolved	0.0057	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Uranium, Dissolved	0.0026	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Uranium, Dissolved	0.0038	0.0002	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Uranium, Dissolved	0.0038	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Uranium, Dissolved	0.0045	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Uranium, Dissolved	0.0061	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Uranium, Dissolved	0.0027	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Uranium, Dissolved	0.0048	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Uranium, Dissolved	0.005	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Uranium, Dissolved	0.006	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Uranium, Dissolved	0.0028	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Uranium, Dissolved	0.0047	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Uranium, Dissolved	0.005	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Uranium, Dissolved	0.0069	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Uranium, Dissolved	0.0031	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Uranium, Dissolved	0.0043	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Uranium, Dissolved	0.0054	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Uranium, Dissolved	0.0065	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Uranium, Dissolved	0.0027	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Uranium, Dissolved	0.004	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Uranium, Dissolved	0.0052	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Uranium, Dissolved	0.0062	0.0002	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Uranium, Dissolved	0.006	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Uranium, Dissolved	0.0027	0.0002	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Uranium, Dissolved	0.0027	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Uranium, Dissolved	0.0038	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Uranium, Dissolved	0.0054	0.0002	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Uranium, Dissolved	0.0053	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Uranium, Dissolved	0.0064	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Uranium, Dissolved	0.0033	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Uranium, Dissolved	0.0052	0.0002	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Uranium, Dissolved	0.0054	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Uranium, Dissolved	0.0054	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Uranium, Dissolved	0.0066	0.0002	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Uranium, Dissolved	0.0031	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Uranium, Dissolved	0.0039	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Uranium, Dissolved	0.0053	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Uranium, Dissolved	0.0048	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Uranium, Dissolved	0.0014	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Uranium, Dissolved	0.0033	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Uranium, Dissolved	0.004	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Uranium, Dissolved	0.0012	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Uranium, Dissolved	0.0003	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Uranium, Dissolved	0.0007	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Uranium, Dissolved	0.0007	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Uranium, Dissolved	0.0055	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Uranium, Dissolved	0.0012	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Uranium, Dissolved	0.0037	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Uranium, Dissolved	0.0042	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Uranium, Dissolved	0.0056	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Uranium, Dissolved	0.0012	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Uranium, Dissolved	0.0042	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Uranium, Dissolved	0.0043	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Uranium, Dissolved	0.0061	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Uranium, Dissolved	0.0014	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Uranium, Dissolved	0.0044	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Uranium, Dissolved	0.0047	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Uranium, Total Recoverable	ND	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Uranium, Total Recoverable	0.0039	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Uranium, Total Recoverable	0.0013	0.0002	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Uranium, Total Recoverable	0.0013	0.0002	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Uranium, Total Recoverable	0.0039	0.0002	mg/L		E200.8

SS-01	Natural Sample	H14120110-002	12/4/2014	Uranium, Total Recoverable	0.0032	0.0002	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Uranium, Total Recoverable	0.0032	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Uranium, Total Recoverable	0.0057	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Uranium, Total Recoverable	0.0021	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Uranium, Total Recoverable	0.0042	0.0002	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Uranium, Total Recoverable	0.004	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Uranium, Total Recoverable	0.0068	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Uranium, Total Recoverable	0.0026	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Uranium, Total Recoverable	0.0046	0.0002	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Uranium, Total Recoverable	0.0051	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Uranium, Total Recoverable	0.0059	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Uranium, Total Recoverable	0.0027	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Uranium, Total Recoverable	0.0042	0.0002	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Uranium, Total Recoverable	0.0044	0.0002	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Uranium, Total Recoverable	0.0061	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Uranium, Total Recoverable	0.006	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Uranium, Total Recoverable	0.0029	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Uranium, Total Recoverable	0.0042	0.0002	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Uranium, Total Recoverable	0.0041	0.0002	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Uranium, Total Recoverable	0.005	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Uranium, Total Recoverable	0.0065	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Uranium, Total Recoverable	0.003	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Uranium, Total Recoverable	0.0051	0.0002	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Uranium, Total Recoverable	0.0056	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Uranium, Total Recoverable	0.0065	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Uranium, Total Recoverable	0.003	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Uranium, Total Recoverable	0.0049	0.0002	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Uranium, Total Recoverable	0.0055	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Uranium, Total Recoverable	0.0073	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Uranium, Total Recoverable	0.0033	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Uranium, Total Recoverable	0.0045	0.0002	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Uranium, Total Recoverable	0.0059	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Uranium, Total Recoverable	0.0068	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Uranium, Total Recoverable	0.0028	0.0002	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Uranium, Total Recoverable	0.0044	0.0002	mg/L		E200.8

SS-11D	Natural Sample	H14120109-007	12/4/2014	Uranium, Total Recoverable	0.0056	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Uranium, Total Recoverable	0.0066	0.0002	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Uranium, Total Recoverable	0.0065	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Uranium, Total Recoverable	0.0029	0.0002	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Uranium, Total Recoverable	0.0026	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Uranium, Total Recoverable	0.004	0.0002	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Uranium, Total Recoverable	0.006	0.0002	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Uranium, Total Recoverable	0.0059	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Uranium, Total Recoverable	0.0068	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Uranium, Total Recoverable	0.0035	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Uranium, Total Recoverable	0.0055	0.0002	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Uranium, Total Recoverable	0.0055	0.0002	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Uranium, Total Recoverable	0.0063	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Uranium, Total Recoverable	0.0068	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Uranium, Total Recoverable	0.0033	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Uranium, Total Recoverable	0.0041	0.0002	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Uranium, Total Recoverable	0.0056	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Uranium, Total Recoverable	0.0052	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Uranium, Total Recoverable	0.0015	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Uranium, Total Recoverable	0.0035	0.0002	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Uranium, Total Recoverable	0.0042	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Uranium, Total Recoverable	0.0013	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Uranium, Total Recoverable	0.0004	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Uranium, Total Recoverable	0.0007	0.0002	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Uranium, Total Recoverable	0.0008	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Uranium, Total Recoverable	0.006	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Uranium, Total Recoverable	0.0013	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Uranium, Total Recoverable	0.0041	0.0002	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Uranium, Total Recoverable	0.0044	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Uranium, Total Recoverable	0.0058	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Uranium, Total Recoverable	0.0014	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Uranium, Total Recoverable	0.0045	0.0002	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Uranium, Total Recoverable	0.0046	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Uranium, Total Recoverable	0.0064	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Uranium, Total Recoverable	0.0015	0.0002	mg/L		E200.8

SS-19	Natural Sample	H14090234-018	9/9/2014	Uranium, Total Recoverable	0.0046	0.0002	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Uranium, Total Recoverable	0.005	0.0002	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8

SS-10A	Natural Sample	H14060106-004	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8

SS-15G	Natural Sample	H14030371-003	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8

SS-06G	Natural Sample	H14060106-001	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8

SS-13	Duplicate	H14120109-010	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Vanadium, Total Recoverable	ND	0.1	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Zinc, Dissolved	0.012	0.008	mg/L	B	E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Zinc, Dissolved	0.021	0.008	mg/L	B	E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Zinc, Dissolved	0.015	0.008	mg/L	B	E200.8

QA Blank	Field Blank	H14090234-005	9/10/2014	Zinc, Dissolved	0.013	0.008	mg/L	B	E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Zinc, Dissolved	0.015	0.008	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Zinc, Dissolved	0.010	0.008	mg/L	B	E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Zinc, Dissolved	0.019	0.008	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Zinc, Dissolved	0.019	0.008	mg/L	B	E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Zinc, Dissolved	0.019	0.008	mg/L	B	E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Zinc, Dissolved	0.021	0.008	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Zinc, Dissolved	0.013	0.008	mg/L	B	E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Zinc, Dissolved	0.022	0.008	mg/L	B	E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Zinc, Dissolved	0.047	0.008	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Zinc, Dissolved	0.017	0.008	mg/L	B	E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Zinc, Dissolved	0.028	0.008	mg/L	B	E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Zinc, Dissolved	0.037	0.008	mg/L	B	E200.8
SS-08	Duplicate	H14030374-004	3/25/2014	Zinc, Dissolved	0.054	0.008	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Zinc, Dissolved	0.057	0.008	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Zinc, Dissolved	0.030	0.008	mg/L	B	E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Zinc, Dissolved	0.051	0.008	mg/L	B	E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Zinc, Dissolved	0.054	0.008	mg/L	B	E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Zinc, Dissolved	0.06	0.008	mg/L	B	E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Zinc, Dissolved	0.045	0.008	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Zinc, Dissolved	0.027	0.008	mg/L	B	E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Zinc, Dissolved	0.027	0.008	mg/L	B	E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Zinc, Dissolved	0.086	0.008	mg/L	B	E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Zinc, Dissolved	0.049	0.008	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Zinc, Dissolved	0.027	0.008	mg/L	B	E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Zinc, Dissolved	0.035	0.008	mg/L	B	E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Zinc, Dissolved	0.093	0.008	mg/L		E200.8

SS-11C	Natural Sample	H14030374-008	3/25/2014	Zinc, Dissolved	0.098	0.008	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Zinc, Dissolved	0.051	0.008	mg/L	B	E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Zinc, Dissolved	0.05	0.008	mg/L	B	E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Zinc, Dissolved	0.138	0.008	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Zinc, Dissolved	0.096	0.008	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Zinc, Dissolved	0.045	0.008	mg/L	B	E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Zinc, Dissolved	0.077	0.008	mg/L	B	E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Zinc, Dissolved	0.128	0.008	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Zinc, Dissolved	0.034	0.008	mg/L	B	E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Zinc, Dissolved	0.035	0.008	mg/L	B	E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Zinc, Dissolved	0.022	0.008	mg/L	B	E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Zinc, Dissolved	0.022	0.008	mg/L	B	E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Zinc, Dissolved	0.101	0.008	mg/L	B	E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Zinc, Dissolved	0.108	0.008	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Zinc, Dissolved	0.107	0.008	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Zinc, Dissolved	0.043	0.008	mg/L	B	E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Zinc, Dissolved	0.017	0.008	mg/L	B	E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Zinc, Dissolved	0.018	0.008	mg/L	B	E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Zinc, Dissolved	0.018	0.008	mg/L	B	E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Zinc, Dissolved	0.101	0.008	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Zinc, Dissolved	0.085	0.008	mg/L	B	E200.8
SS-15A	Natural Sample	H14060106-012	6/2/2014	Zinc, Dissolved	0.017	0.008	mg/L	B	E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Zinc, Dissolved	0.027	0.008	mg/L	B	E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Zinc, Dissolved	0.124	0.008	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Zinc, Dissolved	0.074	0.008	mg/L	B	E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Zinc, Dissolved	0.025	0.008	mg/L	B	E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Zinc, Dissolved	0.021	0.008	mg/L	B	E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Zinc, Dissolved	0.090	0.008	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Zinc, Dissolved	0.019	0.008	mg/L	B	E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Zinc, Dissolved	0.104	0.008	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Zinc, Dissolved	0.032	0.008	mg/L	B	E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Zinc, Dissolved	0.036	0.008	mg/L	B	E200.8

SS-16B	Natural Sample	H14120109-014	12/3/2014	Zinc, Dissolved	0.124	0.008	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Zinc, Dissolved	0.129	0.008	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Zinc, Dissolved	0.027	0.008	mg/L	B	E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Zinc, Dissolved	0.047	0.008	mg/L	B	E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Zinc, Dissolved	0.141	0.008	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Zinc, Dissolved	0.121	0.008	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Zinc, Dissolved	0.034	0.008	mg/L	B	E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Zinc, Dissolved	0.058	0.008	mg/L	B	E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Zinc, Dissolved	0.140	0.008	mg/L		E200.8
QA Blank	Field Blank	H14030374-012	3/24/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14030374-005	3/25/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14060106-008	6/2/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14060105-001	6/3/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14090234-013	9/9/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14090234-005	9/10/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14120109-008	12/3/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
QA Blank	Field Blank	H14120110-001	12/4/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-01	Natural Sample	H14030371-001	3/25/2014	Zinc, Total Recoverable	0.009	0.008	mg/L		E200.8
SS-01	Natural Sample	H14060105-002	6/3/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-01	Duplicate	H14060105-003	6/3/2014	Zinc, Total Recoverable	0.009	0.008	mg/L		E200.8
SS-01	Natural Sample	H14090233-001	9/11/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-01	Natural Sample	H14120110-002	12/4/2014	Zinc, Total Recoverable	0.010	0.008	mg/L		E200.8
SS-01	Duplicate	H14120110-003	12/4/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-05A	Natural Sample	H14030371-002	3/25/2014	Zinc, Total Recoverable	0.024	0.008	mg/L		E200.8
SS-05A	Natural Sample	H14060105-004	6/3/2014	Zinc, Total Recoverable	0.024	0.008	mg/L		E200.8
SS-05A	Natural Sample	H14090233-002	9/11/2014	Zinc, Total Recoverable	0.025	0.008	mg/L		E200.8
SS-05A	Natural Sample	H14120110-004	12/4/2014	Zinc, Total Recoverable	0.046	0.008	mg/L		E200.8
SS-06G	Natural Sample	H14030374-001	3/25/2014	Zinc, Total Recoverable	0.032	0.008	mg/L		E200.8
SS-06G	Natural Sample	H14060106-001	6/3/2014	Zinc, Total Recoverable	0.035	0.008	mg/L		E200.8
SS-06G	Natural Sample	H14090234-001	9/11/2014	Zinc, Total Recoverable	0.029	0.008	mg/L		E200.8
SS-06G	Natural Sample	H14120109-001	12/4/2014	Zinc, Total Recoverable	0.041	0.008	mg/L		E200.8
SS-07	Natural Sample	H14030374-002	3/25/2014	Zinc, Total Recoverable	0.049	0.008	mg/L		E200.8
SS-07	Natural Sample	H14060106-002	6/3/2014	Zinc, Total Recoverable	0.032	0.008	mg/L		E200.8
SS-07	Natural Sample	H14090234-002	9/11/2014	Zinc, Total Recoverable	0.041	0.008	mg/L		E200.8
SS-07	Natural Sample	H14120109-002	12/4/2014	Zinc, Total Recoverable	0.049	0.008	mg/L		E200.8

SS-08	Duplicate	H14030374-004	3/25/2014	Zinc, Total Recoverable	0.069	0.008	mg/L		E200.8
SS-08	Natural Sample	H14030374-003	3/25/2014	Zinc, Total Recoverable	0.071	0.008	mg/L		E200.8
SS-08	Natural Sample	H14060106-003	6/3/2014	Zinc, Total Recoverable	0.059	0.008	mg/L		E200.8
SS-08	Natural Sample	H14090234-003	9/10/2014	Zinc, Total Recoverable	0.064	0.008	mg/L		E200.8
SS-08	Duplicate	H14090234-004	9/10/2014	Zinc, Total Recoverable	0.065	0.008	mg/L		E200.8
SS-08	Natural Sample	H14120109-003	12/4/2014	Zinc, Total Recoverable	0.102	0.008	mg/L		E200.8
SS-10A	Natural Sample	H14030374-006	3/25/2014	Zinc, Total Recoverable	0.063	0.008	mg/L		E200.8
SS-10A	Natural Sample	H14060106-004	6/3/2014	Zinc, Total Recoverable	0.052	0.008	mg/L		E200.8
SS-10A	Natural Sample	H14090234-006	9/10/2014	Zinc, Total Recoverable	0.038	0.008	mg/L		E200.8
SS-10A	Natural Sample	H14120109-004	12/4/2014	Zinc, Total Recoverable	0.138	0.008	mg/L		E200.8
SS-10B	Natural Sample	H14030374-007	3/25/2014	Zinc, Total Recoverable	0.071	0.008	mg/L		E200.8
SS-10B	Natural Sample	H14060106-005	6/3/2014	Zinc, Total Recoverable	0.052	0.008	mg/L		E200.8
SS-10B	Natural Sample	H14090234-007	9/10/2014	Zinc, Total Recoverable	0.047	0.008	mg/L		E200.8
SS-10B	Natural Sample	H14120109-005	12/4/2014	Zinc, Total Recoverable	0.14	0.008	mg/L		E200.8
SS-11C	Natural Sample	H14030374-008	3/25/2014	Zinc, Total Recoverable	0.116	0.008	mg/L		E200.8
SS-11C	Natural Sample	H14060106-006	6/3/2014	Zinc, Total Recoverable	0.078	0.008	mg/L		E200.8
SS-11C	Natural Sample	H14090234-008	9/10/2014	Zinc, Total Recoverable	0.070	0.008	mg/L		E200.8
SS-11C	Natural Sample	H14120109-006	12/4/2014	Zinc, Total Recoverable	0.189	0.008	mg/L		E200.8
SS-11D	Natural Sample	H14030374-009	3/25/2014	Zinc, Total Recoverable	0.113	0.008	mg/L		E200.8
SS-11D	Natural Sample	H14060106-007	6/3/2014	Zinc, Total Recoverable	0.066	0.008	mg/L		E200.8
SS-11D	Natural Sample	H14090234-009	9/10/2014	Zinc, Total Recoverable	0.095	0.008	mg/L		E200.8
SS-11D	Natural Sample	H14120109-007	12/4/2014	Zinc, Total Recoverable	0.177	0.008	mg/L		E200.8
SS-13	Natural Sample	H14030374-010	3/24/2014	Zinc, Total Recoverable	0.08	0.008	mg/L		E200.8
SS-13	Duplicate	H14030374-011	3/24/2014	Zinc, Total Recoverable	0.066	0.008	mg/L		E200.8
SS-13	Natural Sample	H14060106-009	6/2/2014	Zinc, Total Recoverable	0.051	0.008	mg/L		E200.8
SS-13	Duplicate	H14060106-010	6/2/2014	Zinc, Total Recoverable	0.056	0.008	mg/L		E200.8
SS-13	Natural Sample	H14090234-010	9/10/2014	Zinc, Total Recoverable	0.112	0.008	mg/L		E200.8
SS-13	Natural Sample	H14120109-009	12/3/2014	Zinc, Total Recoverable	0.236	0.008	mg/L		E200.8
SS-13	Duplicate	H14120109-010	12/3/2014	Zinc, Total Recoverable	0.231	0.008	mg/L		E200.8
SS-14	Natural Sample	H14030374-013	3/24/2014	Zinc, Total Recoverable	0.088	0.008	mg/L		E200.8
SS-14	Natural Sample	H14060106-011	6/2/2014	Zinc, Total Recoverable	0.057	0.008	mg/L		E200.8
SS-14	Natural Sample	H14090234-011	9/9/2014	Zinc, Total Recoverable	0.033	0.008	mg/L		E200.8
SS-14	Duplicate	H14090234-012	9/9/2014	Zinc, Total Recoverable	0.034	0.008	mg/L		E200.8
SS-14	Natural Sample	H14120109-011	12/3/2014	Zinc, Total Recoverable	0.302	0.008	mg/L		E200.8
SS-15A	Natural Sample	H14030374-014	3/24/2014	Zinc, Total Recoverable	0.129	0.008	mg/L		E200.8

SS-15A	Natural Sample	H14060106-012	6/2/2014	Zinc, Total Recoverable	0.058	0.008	mg/L		E200.8
SS-15A	Natural Sample	H14090234-014	9/9/2014	Zinc, Total Recoverable	0.048	0.008	mg/L		E200.8
SS-15A	Natural Sample	H14120109-012	12/3/2014	Zinc, Total Recoverable	0.139	0.008	mg/L		E200.8
SS-15B	Natural Sample	H14030374-015	3/24/2014	Zinc, Total Recoverable	0.1	0.008	mg/L		E200.8
SS-15B	Natural Sample	H14060106-013	6/2/2014	Zinc, Total Recoverable	0.027	0.008	mg/L		E200.8
SS-15B	Natural Sample	H14090234-015	9/9/2014	Zinc, Total Recoverable	0.044	0.008	mg/L		E200.8
SS-15B	Natural Sample	H14120109-013	12/3/2014	Zinc, Total Recoverable	0.096	0.008	mg/L		E200.8
SS-15G	Natural Sample	H14030371-003	3/24/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-15G	Natural Sample	H14060105-005	6/2/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-15G	Natural Sample	H14090233-003	9/9/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-15G	Natural Sample	H14120110-005	12/3/2014	Zinc, Total Recoverable	ND	0.008	mg/L		E200.8
SS-16B	Natural Sample	H14030374-016	3/24/2014	Zinc, Total Recoverable	0.128	0.008	mg/L		E200.8
SS-16B	Natural Sample	H14060106-014	6/2/2014	Zinc, Total Recoverable	0.042	0.008	mg/L		E200.8
SS-16B	Natural Sample	H14090234-016	9/9/2014	Zinc, Total Recoverable	0.088	0.008	mg/L		E200.8
SS-16B	Natural Sample	H14120109-014	12/3/2014	Zinc, Total Recoverable	0.131	0.008	mg/L		E200.8
SS-17D	Natural Sample	H14030374-017	3/24/2014	Zinc, Total Recoverable	0.158	0.008	mg/L		E200.8
SS-17D	Natural Sample	H14060106-015	6/2/2014	Zinc, Total Recoverable	0.058	0.008	mg/L		E200.8
SS-17D	Natural Sample	H14090234-017	9/9/2014	Zinc, Total Recoverable	0.095	0.008	mg/L		E200.8
SS-17D	Natural Sample	H14120109-015	12/3/2014	Zinc, Total Recoverable	0.146	0.008	mg/L		E200.8
SS-19	Natural Sample	H14030374-018	3/24/2014	Zinc, Total Recoverable	0.145	0.008	mg/L		E200.8
SS-19	Natural Sample	H14060106-016	6/2/2014	Zinc, Total Recoverable	0.065	0.008	mg/L		E200.8
SS-19	Natural Sample	H14090234-018	9/9/2014	Zinc, Total Recoverable	0.095	0.008	mg/L		E200.8
SS-19	Natural Sample	H14120109-016	12/3/2014	Zinc, Total Recoverable	0.144	0.008	mg/L		E200.8

ND Concentration below analytical reporting limit.

B Associated field blank had detectable concentrations of this analyte.

J Associated field duplicate and field sample pair had relative percent difference (RPD) of at least 25%.

Table C2. Surface water field parameters from Streamside Tailings Operable Unit, 2014.

Site	Date	Time	Air Temp (F; estimated)	pH	Water Temp (C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (% saturation)	Conductivity (µS/cm)	Turbidity (NTU)	Weather	Streamflow (cfs)	Field Observations
SS-01	3/25/2014	17:30	50		7.01	10.56	87.0	252	3.05	Hazy clouds, light breeze, mild.	9.99	Moderate flow, clear; no ice on banks but traces of snow in floodplain.
SS-05A	3/25/2014	17:00	50	7.58	8.38	11.81	100.7	309	3.19	Mostly clear, mild, sunny.	14.10	Channel open; traces of shelf ice and some snow along banks; water clear; fine sediment on stream bottom.
SS-06G	3/25/2014	16:00	50	8.17	7.80	12.30	103.4	435	3.03	Thin clouds, sunny, warm.	16.66	
SS-07	3/25/2014	15:00	45	7.57	7.72	11.21	94.1	463	3.34	Sunny and warm.	21.00*	Channel is ice-free; some snow on HW side of channel; low flow, pretty clear. Did not measure flow - use USGS data.
SS-08	3/25/2014	13:30	40	7.69	7.44	11.82	98.7	469	4.95	Sunny, light breeze, warming up.	21.83	
SS-10A	3/25/2014	11:30	32	8.14	4.45	13.97	107.9	457	4.56	Windy, mostly cloudy.	23.11	A few small patches of snow and ice in floodplain; channel completely open, water pretty clear.
SS-10B	3/25/2014	10:30	35	8.18	3.85	13.67	104.0	460	4.15	Breezy, cool.	22.29	Muck typically present in channel has largely flushed out; rocky substrate with attached algae growth present. Moderate flow, pretty clear water.
SS-11C	3/25/2014	10:30	30	7.78	3.24	11.47	85.9	557	4.44	Cloudy, cold, breezy.	24.56	No snow or ice in immediate floodplain; moderately low flow, pretty clear.

SS-11D	3/25/2014	9:30	25	7.60	2.31	10.78	78.7	496	3.95	Thin cloud cover, breezy, cold.	29.50	Moderately low flow, clear water.
SS-13	3/24/2014	17:30	35	8.40	6.73	12.93	105.9	485	5.15	Cloudy, cool, light breeze.	31.50	Banks and immediate floodplain ice- and snow-free. Evidence of recent very high water event. Floodplain debris and silted in vegetation, as well as logs/wood at culverts downstream of site. Hint of turbidity but pretty transparent.
SS-14	3/24/2014	16:00	40	8.38	7.27	13.44	111.6	504	5.55	Cloudy, calm, cool.	34.61	Banks 95% i.e.-free, very limited snow left in the floodplain. Only a very slight hint of turbidity present; moderate flow.
SS-15A	3/24/2014	14:30	35	8.07	5.32	11.45	90.6	517	7.44	Clouding up, cool.	28.78	Shelf ice but no channel ice. Mud on ice shelf 2 feet above present water elevation indicating recent high water event. Slight turbidity, moderate flow.
SS-15G	3/24/2014	13:45	35	7.74	0.30	12.53	86.4	227	3.31	Calm, mostly clear, sunny.	9.43	German Gulch channel still has around 50% ice cover. Moderately low flow and very clear.
SS-15B	3/24/2014	13:00	35		2.65	12.25	90.3	432	5.03	Sunny, mostly clear.	44.37	Shelf ice present but channel mostly open. Pretty clear water, hint of turbidity. Moderate flow.
SS-16B	3/24/2014	11:00	30	7.85	2.01	12.21	88.6	477	4.44	Mostly clear, warming up some.	38.53	Fragments of ice in limited area on banks. Traces of

												snow in floodplain. Creek has a slight hint of turbidity, but pretty clear.
SS-17D	3/24/2014	10:00	25	7.73	0.76	12.09	84.5	477	5.61	Clear and cold.	47.00*	Ice-free banks, snow-free floodplain. Moderate flow, pretty clear.
SS-19	3/24/2014	9:00	20	7.66	0.48	12.06	83.7	472	5.72	Cool and windy, clear.	45.04	Banks largely ice-free and channel completely open. A hint of turbidity but not overly cloudy. Established new site this event, upstream of RR bridge and upstream of the riprap.
SS-01	6/3/2014	17:45	70	7.44	16.98	8.96	92.7	172	7.07	Partly cloudy, sunny, warm.	26.92	Slightly turbid, strong brown color. Bankfull flow. Surface debris and CPOM in water column.
SS-05A	6/3/2014	16:00	72	7.88	16.99	12.58	130.2	201	9.38	Thunderheads building. Warm, light breeze.	31.12	Moderate flow. Turbid water with strong brown color.
SS-06G	6/3/2014	15:30	74	7.98	16.95	12.04	125.0	269	9.98		35.94	Moderately high flow, moderate turbidity. Water has a strong brown color/tannin stain. Foam patches on surface above and below the WWTP outfall.
SS-07	6/3/2014	14:30	72	7.62	16.10	10.17	103.2	347	9.84	Thunderheads building. Warm, windy.	41.00*	Moderate flow, moderate turbidity. Less foam on surface here.
SS-08	6/3/2014	13:15	72	7.37	16.27	7.53	76.7	327	8.94	Partly cloudy, warm, calm.	41.61	Moderate flow, moderate turbidity.
SS-10A	6/3/2014	12:00	70	7.75	15.11	10.66	106.1	322	6.88	Lofty clouds, breezy, warm.	43.96	Moderate flow, moderately low turbidity. Less sloughing algae and CPOM at this site.

SS-10B	6/3/2014	11:00	70	7.30	14.16	10.95	106.7	321	6.88	Partly cloudy, mild, light breeze.	36.68	Moderate flow, moderate turbidity. Foam patches on water surface.
SS-11C	6/3/2014	10:00	60	7.70	12.66	10.80	101.7	378	7.14	Sunny, light breeze.	40.29	Moderate flow, slight to moderate turbidity. Browns Gulch is clearer but with a brownish stain. Fine organic particulate in water column at SS-11C with some sloughing filamentous algae and CPOM.
SS-11D	6/3/2014	9:15	58	7.85	12.20	8.81	82.2	323	7.82	Clear, sunny, light breeze.	56.82	Moderate turbidity, moderately high flow. Coarse organic particulate matter in water column. Sloughing filamentous algae catching on wading rod regularly.
SS-13	6/2/2014	18:00	70	7.66	18.07	9.82	103.9	358	8.28	Light rain showers.	56.87	Moderately high flow, moderately elevated turbidity -- brownish color. Visible coarse organic particulate in water column like at SS-14. Lots of sloughing filamentous algae (not Cladophora) in the water column.
SS-14	6/2/2014	15:45	72	8.06	18.14	12.17	129.1	354	11.20	Increasing clouds, mild temperatures.	62.85	Moderate flow, easy to wade. COPM in water column. Moderately turbid, brownish color. Lots of sloughing dark green filamentous algae.
SS-15A	6/2/2014	14:00	70	7.95	16.17	10.66	108.5	364	8.73	Lofty clouds, sunny, light breeze.	59.40	Nearly bankfull flow. Moderate turbidity. Lots of foam patches on

												water surface. Not bad wading upstream from German Gulch.
SS-15G	6/2/2014	13:15	65	6.57	9.55	9.67	84.7	171	4.31	Clear, sunny, warm.	82.99	Very high flow, swift velocity. Only a very slight hint of turbidity.
SS-15B	6/2/2014	12:30	65	7.05	10.72	10.14	91.5	252	6.19	Sunny, calm, warm.	147.24	Bankfull flow and very swift. Slight turbidity. Much clearer than all the downstream sites. Lots of foam patches on water surface.
SS-16B	6/2/2014	11:15	58	7.22	9.74	10.88	95.8	251	7.15	Clouds building, breezy, mild.	141.53	Creek is out of the main channel at the usual sampling site. Moved downstream 100 yds or so to an area with a single thread channel. Turbid but less so than at SS-17D or SS-19.
SS-17D	6/2/2014	10:30	50	7.60	9.27	10.89	94.9	251	8.78	Clear, breezy.	135.00*	Nearly bankfull, moderately high turbidity.
SS-19	6/2/2014	9:00	48	6.93	8.59	10.34	88.5	258	10.80	Mostly clear, breezy, cool.	168.35	Bankfull flow and very turbid. Sampled upstream of left bank seepage channel. Flow may have peaked last week.
SS-01	9/11/2014	13:30	42	7.69	8.02	11.20	94.4	245	2.50	Partly cloudy, calm, storm is over.	5.74	Moderate flow, clear water. Performed biomonitoring upstream behind motel.
SS-05A	9/11/2014	12:15	38	7.77	7.89	10.60	89.4	286	4.25	100% cloud cover, a few snow flakes.	11.39	Moderate flow, hint of turbidity.
SS-06G	9/11/2014	10:00	38	8.24	8.51	11.74	100.4	425	5.40	Cloudy, a few snow flakes, cold.	15.60	Slight turbidity, presumably from rain and snow last night.

SS-07	9/11/2014	10:00	35	7.78	9.47	10.13	88.4	431	4.97	Mostly cloudy, cold, snow last night.	26.00*	Moderate flow, slight turbidity. Snow last night, tapering off this morning.
SS-08	9/10/2014	16:00	45	7.41	13.62	7.03	67.7	430	3.09	Raining, cool.	22.90	Moderate flow, clear water. Raining and a cold wind.
SS-10A	9/10/2014	14:00	48	8.27	12.42	12.64	118.5	440	2.14	Mostly cloudy, breezy, cool.	18.96	Moderate flow, clear water. Performed biomonitoring upstream in riffle area.
SS-10B	9/10/2014	13:00	50	8.20	11.97	12.34	114.5	442	2.92	Mostly cloudy, cool. Threatening to rain.	20.16	Water very clear. Sloughing plant material in water column. Channel is full of aquatic grass and macrophytes. Performed biomonitoring upstream in riffle area.
SS-11C	9/10/2014	12:30	50	8.21	11.13	12.42	113.1	512	2.79	Mostly cloudy, cool, breezy.	22.47	Moderate flow, clear water, heavy plant growth present. Focused biomonitoring on riffle area upstream.
SS-11D	9/10/2014	11:00	45	7.91	10.41	10.42	93.4	502	4.36	Mostly cloudy, light breeze, cool.	24.38	Moderate flow, clear water. Heavy aquatic plant growth present - macrophytes, filamentous algae, diatoms.
SS-13	9/10/2014	9:00	40	7.72	10.09	7.96	70.7	504	2.96	Cloudy, light rain, cool.	25.57	Moderate flow, clear water. Lots of macrophytes and filamentous algae present.
SS-14	9/9/2014	18:45	60	9.02	15.39	11.27	112.8	491	3.07	Partly cloudy, cooling off.	27.56	Moderate flow, clear water. Moderately heavy periphyton present.
SS-15A	9/9/2014	16:30	65	8.77	15.31	9.51	95.0	489	3.37	Partly cloudy, mild, light breeze.	22.54	Good flow, water pretty clear. Foam patches on water

												surface.
SS-15G	9/9/2014	16:00	65	7.97	12.13	9.61	89.5	220	0.78	Thin clouds, breezy, pleasant.	5.11	Very low flow (upstream diversion), very clear water.
SS-15B	9/9/2014	15:00	60	8.42	14.47	9.60	94.2	444	3.18	Mostly clear, sunny, mild, light breeze.	26.69	Heavy macrophyte growth, moderately heavy diatom algae, some filamentous algae. Clear water.
SS-16B	9/9/2014	13:00	60	8.02	13.04	9.72	92.2	448	9.68	Partly cloudy, sunny, light breeze. Thin clouds, sunny, light breeze.	31.01	Moderate flow, slight to moderate turbidity.
SS-17D	9/9/2014	11:00	55	8.21	11.66	10.51	97.0	450	8.15	Thin clouds, sunny, light breeze.	28.00*	Slight to moderate turbidity - source unknown.
SS-19	9/9/2014	9:00	50	7.87	10.14	9.92	88.3	460	7.90	Clear, calm.	31.04	Slight to moderate turbidity. Collected macroinvertebrate sample upstream in riffle area near bend, also periphyton sample.
SS-01	12/4/2014	16:15	30	7.39	4.48	9.55	73.8	295	3.93	Clearing skies, calm.	6.79	Channel is ice free. Water very clear.
SS-05A	12/4/2014	14:45	34	7.57	4.89	9.60	75.0	341	6.25	Mostly cloudy, calm.	11.73	Moderate flow, mostly ice free banks. Relatively clear, low TSS.
SS-06G	12/4/2014	14:00	34	8.10	4.13	10.64	81.5	470	6.62	100% cloud cover.	16.12	Moderately low flow, very clear. No ice whatsoever.
SS-07	12/4/2014	13:15	34	7.45	7.42	8.07	67.2	507	4.57	Cloudy, impending snow showers.	19.00*	Channel is ice free. Moderately low flow. Relatively clear water.
SS-08	12/4/2014	12:30	34	7.61	5.45	8.67	68.8	506	8.84	Mostly cloudy, calm.	22.77	Channel is open, no shelf ice. Only slightly turbid due to fine VSS. Pretty clear.
SS-10A	12/4/2014	11:30	32	7.60	3.94	9.61	73.3	509	9.97	Cloudy, calm.	22.02	Limited shelf ice, channel mostly open. No slush ice or shelf ice. Slight

												turbidity, fine VSS particles.
SS-10B	12/4/2014	10:45	32	7.57	3.78	9.42	71.5	510	9.94	Overcast, breezy, precip. approaching.	20.25	Mostly open channel, ~2' of shelf ice mostly suspended above surface. Collected water with DH-81 and gauged flow at usual section ~25m above bridge.
SS-11C	12/4/2014	10:00	30	7.56	3.17	9.63	71.9	611	9.89	Mostly cloudy, calm, cool.	24.71	Channel is ice free, no slush ice or anchor ice. Fine VSS particulate in water column contributing to moderate turbidity levels.
SS-11D	12/4/2014	9:00	30	7.33	2.74	9.42	69.6	567	9.94	Partly cloudy, calm, cool.	26.60	Open channel with no shelf ice. Collected water with DH-81 and gauged flow at usual spot.
SS-13	12/3/2014	17:00	24	7.78	1.40	10.83	77.0	575	22.10	Overcast, breezy, chilly.	31.41	Open channel with some suspended/collapsed shelf ice. Collected water and duplicate sample with DH-81, gauged flow at usual section.
SS-14	12/3/2014	15:15	26	7.74	0.73	10.78	75.4	572	36.80	Mostly cloudy, breezy, cold.	31.79	2-3' of suspended shelf ice, anchor ice not visible due to high turbidity (source?). Collected water sample with DH-81 and gauged flow at usual spot.
SS-15A	12/3/2014	13:45	30	7.91	0.00	12.31	84.0	578	3.11	Partly cloudy, light breeze, cold.	32.89	Significant shelf ice and continuous anchor ice. Depth integrated water across full channel width (chopped ice). Clear water.

SS-15G	12/3/2014	13:00	30	7.99	0.00	12.52	85.3	237	1.34	Partly cloudy, light breeze, cool.		Channel is nearly completely ice covered. Grab sampled on an open hole. No flow gauged and no sediment sample collected.
SS-15B	12/3/2014	12:15	25	8.06	0.00	12.39	84.6	490	2.60	Partly cloudy, breezy.	32.24	Heavy anchor/slush ice over shady half of channel. Relatively little shelf ice. Collected water sample with DH-81 and gauged flow just above pipeline crossing. Remediation work underway immediately downstream of sample site.
SS-16B	12/3/2014	10:45	20	7.99	0.00	12.23	83.3	502	2.64	Mostly cloudy, cold.	34.61	Extensive shelf ice, lots of anchor ice but no slush ice. Broke entire channel open for cross sectional EWI sampling. Foam patches on water, water clear.
SS-17D	12/3/2014	9:45	15	7.61	0.00	12.28	83.8	520	2.71	Mostly cloudy, light breeze, cold.		Water clear. Anchor ice on stream bottom. Shelf ice present but channel mostly open here.
SS-19	12/3/2014	9:00	15	7.85	0.00	11.85	81.1	523	3.18	Cloudy, calm, cold.		Channel is iced over. Grab sampled with churn splitter bucket through a hole in the ice downstream of the RR bridge. Could not gauge flow or collect a sediment sample..

* Streamflow measured by U.S. Geological Survey at co-located gauge. Data may be provisional.

APPENDIX D

SEDIMENT DATA

APPENDIX D
SEDIMENT DATA

Table D1. Instream sediment monitoring data from Streamside Tailings Operable Unit, 2014.

Site	Sieve Size	Type	Lab ID	Collected Date	Parameter	Results	RL	Units	Qualifier	Method
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Aluminum, Total	10600	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Barium, Total	113	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Chromium, Total	16	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Copper, Total	145	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Iron, Total	12800	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Lead, Total	59	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Manganese, Total	407	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Molybdenum, Total	6	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Vanadium, Total	36	1	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Zinc, Total	145	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Aluminum, Total	2870	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Barium, Total	39	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Copper, Total	30	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Iron, Total	7260	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Lead, Total	13	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Manganese, Total	127	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Zinc, Total	106	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Aluminum, Total	2640	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Barium, Total	38	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Copper, Total	16	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Iron, Total	4560	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Lead, Total	8	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Manganese, Total	106	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Zinc, Total	26	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Aluminum, Total	22000	7	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Arsenic, Total	35	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Barium, Total	235	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Boron, Total	10	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Cadmium, Total	1.9	0.3	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Chromium, Total	34	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Copper, Total	302	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Iron, Total	26500	6	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Lead, Total	123	7	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Manganese, Total	845	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Mercury, Total	0.16	0.10	mg/kg - dry		SW7471B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Molybdenum, Total	13	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Nickel, Total	17	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Vanadium, Total	75	2	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14030371-004	3/25/2014	Zinc, Total	301	5	mg/kg - dry	J	SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Aluminum, Total	3450	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Arsenic, Total	12	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Barium, Total	47	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Cadmium, Total	0.2	0.2	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Copper, Total	36	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Iron, Total	8740	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Lead, Total	15	5	mg/kg - dry		SW6010B

SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Manganese, Total	153	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Vanadium, Total	24	1	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14030371-005	3/25/2014	Zinc, Total	127	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Aluminum, Total	3210	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Barium, Total	47	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Cadmium, Total	0.2	0.2	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Chromium, Total	6	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Copper, Total	20	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Iron, Total	5560	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Lead, Total	10	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Manganese, Total	129	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Vanadium, Total	12	1	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14030371-006	3/25/2014	Zinc, Total	32	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Aluminum, Total	8910	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Arsenic, Total	95	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Barium, Total	167	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Boron, Total	6	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Cadmium, Total	7.1	0.2	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Chromium, Total	44	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Copper, Total	1010	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Iron, Total	18400	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Lead, Total	389	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Manganese, Total	832	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Mercury, Total	0.43	0.10	mg/kg		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Molybdenum, Total	8	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Nickel, Total	19	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Vanadium, Total	45	1	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Zinc, Total	1480	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Aluminum, Total	3620	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Arsenic, Total	47	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Barium, Total	57	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Cadmium, Total	2.2	0.2	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Chromium, Total	18	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Cobalt, Total	7	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Copper, Total	390	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Iron, Total	34600	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Lead, Total	129	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Manganese, Total	531	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Vanadium, Total	50	1	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Zinc, Total	878	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Aluminum, Total	3140	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Arsenic, Total	56	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Barium, Total	68	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Copper, Total	196	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Iron, Total	9110	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Lead, Total	79	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Manganese, Total	258	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Zinc, Total	526	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Aluminum, Total	19400	7	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Arsenic, Total	208	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Barium, Total	364	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Boron, Total	13	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Cadmium, Total	15.4	0.2	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Chromium, Total	97	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Copper, Total	2210	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Iron, Total	40100	6	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Lead, Total	848	6	mg/kg - dry	J	SW6010B

SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Manganese, Total	1820	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Mercury, Total	0.94	0.10	mg/kg - dry		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Molybdenum, Total	18	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Nickel, Total	42	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Silver, Total	10	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Uranium, Total	10	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Vanadium, Total	99	1	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14030371-007	3/25/2014	Zinc, Total	3220	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Aluminum, Total	4600	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Arsenic, Total	60	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Barium, Total	72	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Cadmium, Total	2.8	0.2	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Chromium, Total	23	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Copper, Total	496	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Iron, Total	43900	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Lead, Total	164	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Manganese, Total	675	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Mercury, Total	0.1	0.10	mg/kg - dry		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Vanadium, Total	64	1	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14030371-008	3/25/2014	Zinc, Total	1120	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Aluminum, Total	3750	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Arsenic, Total	67	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Barium, Total	81	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Cadmium, Total	1.3	0.2	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Copper, Total	234	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Iron, Total	10900	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Lead, Total	95	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Manganese, Total	309	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Vanadium, Total	14	1	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14030371-009	3/25/2014	Zinc, Total	629	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Aluminum, Total	7540	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Arsenic, Total	26	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Barium, Total	94	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Boron, Total	5	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Chromium, Total	17	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Copper, Total	227	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Iron, Total	10300	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Lead, Total	121	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Manganese, Total	1110	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Mercury, Total	0.3	0.10	mg/kg		SW7471B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Molybdenum, Total	6	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Vanadium, Total	31	1	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Zinc, Total	659	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Aluminum, Total	3910	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Barium, Total	96	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Cadmium, Total	1.3	0.2	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Copper, Total	97	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Iron, Total	9280	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Lead, Total	57	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Manganese, Total	993	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Mercury, Total	0.13	0.10	mg/kg		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Vanadium, Total	25	1	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Zinc, Total	430	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Aluminum, Total	2550	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Barium, Total	82	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Copper, Total	51	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Iron, Total	4340	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Lead, Total	22	5	mg/kg		SW6010B

SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Manganese, Total	1460	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Zinc, Total	198	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Aluminum, Total	20100	8	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Arsenic, Total	68	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Barium, Total	250	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Boron, Total	14	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Cadmium, Total	7.7	0.2	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Chromium, Total	45	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Copper, Total	604	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Iron, Total	27400	7	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Lead, Total	322	8	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Manganese, Total	2950	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Mercury, Total	0.79	0.10	mg/kg - dry	J	SW7471B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Molybdenum, Total	17	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Nickel, Total	27	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Vanadium, Total	83	2	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14030374-019	3/25/2014	Zinc, Total	1750	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Aluminum, Total	5650	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Arsenic, Total	25	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Barium, Total	139	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Cadmium, Total	1.9	0.2	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Copper, Total	140	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Iron, Total	13400	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Lead, Total	82	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Manganese, Total	1440	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Mercury, Total	0.19	0.10	mg/kg - dry		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Vanadium, Total	36	1	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14030374-020	3/25/2014	Zinc, Total	622	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Aluminum, Total	3270	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Arsenic, Total	15	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Barium, Total	104	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Boron, Total	5	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Copper, Total	65	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Iron, Total	5570	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Lead, Total	29	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Manganese, Total	1870	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14030374-021	3/25/2014	Zinc, Total	254	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Aluminum, Total	7080	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Arsenic, Total	22	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Barium, Total	99	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Cadmium, Total	2.2	0.2	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Copper, Total	218	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Iron, Total	9500	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Lead, Total	101	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Manganese, Total	650	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Mercury, Total	0.29	0.10	mg/kg		SW7471B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Vanadium, Total	25	1	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Zinc, Total	583	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Aluminum, Total	3670	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Arsenic, Total	21	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Barium, Total	76	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Cadmium, Total	2.1	0.2	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Copper, Total	243	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Iron, Total	18800	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Lead, Total	56	5	mg/kg		SW6010B

SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Manganese, Total	463	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Mercury, Total	0.34	0.10	mg/kg		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Vanadium, Total	42	1	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Zinc, Total	657	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Aluminum, Total	2250	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Barium, Total	54	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Copper, Total	69	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Iron, Total	6190	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Lead, Total	33	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Manganese, Total	588	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Zinc, Total	292	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Aluminum, Total	18500	8	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Arsenic, Total	57	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Barium, Total	259	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Boron, Total	13	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Cadmium, Total	5.7	0.2	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Chromium, Total	27	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Copper, Total	571	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Iron, Total	24800	7	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Lead, Total	264	8	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Manganese, Total	1700	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Mercury, Total	0.76	0.10	mg/kg - dry	J	SW7471B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Molybdenum, Total	13	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Nickel, Total	16	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Vanadium, Total	66	2	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14030374-022	3/25/2014	Zinc, Total	1530	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Aluminum, Total	6170	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Arsenic, Total	36	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Barium, Total	128	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Cadmium, Total	3.5	0.2	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Copper, Total	409	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Iron, Total	31600	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Lead, Total	93	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Manganese, Total	779	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Mercury, Total	0.58	0.10	mg/kg - dry		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Vanadium, Total	71	1	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14030374-023	3/25/2014	Zinc, Total	1100	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Aluminum, Total	3290	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Arsenic, Total	21	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Barium, Total	80	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Cadmium, Total	1.3	0.2	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Copper, Total	101	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Iron, Total	9070	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Lead, Total	49	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Manganese, Total	861	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Mercury, Total	0.12	0.10	mg/kg - dry		SW7471B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Vanadium, Total	23	1	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14030374-024	3/25/2014	Zinc, Total	428	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Aluminum, Total	5750	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Arsenic, Total	18	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Barium, Total	100	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Cadmium, Total	3.3	0.2	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Chromium, Total	26	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Copper, Total	245	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Iron, Total	8520	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Lead, Total	156	5	mg/kg		SW6010B

SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Manganese, Total	407	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Mercury, Total	0.65	0.10	mg/kg		SW7471B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Nickel, Total	14	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Zinc, Total	547	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Aluminum, Total	3250	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Barium, Total	64	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Cadmium, Total	2	0.2	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Copper, Total	104	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Iron, Total	7420	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Lead, Total	104	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Manganese, Total	282	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Mercury, Total	0.35	0.10	mg/kg		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Zinc, Total	384	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Aluminum, Total	3410	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Barium, Total	42	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Copper, Total	103	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Iron, Total	6250	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Lead, Total	35	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Manganese, Total	158	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Vanadium, Total	13	1	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Zinc, Total	174	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Aluminum, Total	20700	10	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Arsenic, Total	64	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Barium, Total	359	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Boron, Total	16	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Cadmium, Total	11.7	0.2	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Chromium, Total	93	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Copper, Total	884	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Iron, Total	30700	10	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Lead, Total	561	10	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Manganese, Total	1470	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Mercury, Total	2.3	0.36	mg/kg - dry	J	SW7471B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Molybdenum, Total	14	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Nickel, Total	50	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Silver, Total	6	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Uranium, Total	8	5	mg/kg - dry		SW6020

SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Vanadium, Total	58	2	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14030374-025	3/25/2014	Zinc, Total	1970	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Aluminum, Total	4070	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Arsenic, Total	16	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Barium, Total	79	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Cadmium, Total	2.5	0.2	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Copper, Total	131	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Iron, Total	9280	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Lead, Total	130	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Manganese, Total	353	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Mercury, Total	0.44	0.10	mg/kg - dry		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Vanadium, Total	22	1	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14030374-026	3/25/2014	Zinc, Total	411	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Aluminum, Total	4140	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Arsenic, Total	9	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Barium, Total	52	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Cadmium, Total	1.4	0.2	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Chromium, Total	6	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Copper, Total	125	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Iron, Total	7590	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Lead, Total	43	5	mg/kg - dry		SW6010B

SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Manganese, Total	191	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Mercury, Total	0.12	0.10	mg/kg - dry		SW7471B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Vanadium, Total	16	1	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14030374-027	3/25/2014	Zinc, Total	211	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Aluminum, Total	8960	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Barium, Total	56	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Cadmium, Total	1.5	0.2	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Copper, Total	89	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Iron, Total	7070	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Lead, Total	50	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Manganese, Total	510	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Mercury, Total	0.19	0.10	mg/kg		SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Zinc, Total	267	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Aluminum, Total	9650	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Barium, Total	127	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Cadmium, Total	1.8	0.2	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Copper, Total	88	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Iron, Total	10700	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Lead, Total	84	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Manganese, Total	914	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Mercury, Total	0.36	0.10	mg/kg		SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Zinc, Total	302	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Aluminum, Total	15400	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Barium, Total	147	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Cadmium, Total	1.5	0.2	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Copper, Total	78	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Iron, Total	11300	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Lead, Total	54	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Manganese, Total	877	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Mercury, Total	0.38	0.10	mg/kg		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Zinc, Total	210	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Aluminum, Total	41900	20	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Arsenic, Total	38	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Barium, Total	264	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Boron, Total	13	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Cadmium, Total	7.4	0.7	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Chromium, Total	38	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Copper, Total	417	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Iron, Total	33100	10	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Lead, Total	232	10	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Manganese, Total	2380	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Mercury, Total	0.92	0.10	mg/kg - dry	J	SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Nickel, Total	24	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Vanadium, Total	47	3	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14030374-028	3/25/2014	Zinc, Total	1250	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Aluminum, Total	15900	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Arsenic, Total	13	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Barium, Total	209	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Cadmium, Total	3	0.2	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Copper, Total	145	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Iron, Total	17500	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Lead, Total	138	5	mg/kg - dry	J	SW6010B

SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Manganese, Total	1500	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Mercury, Total	0.6	0.10	mg/kg - dry		SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Vanadium, Total	35	1	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14030374-029	3/25/2014	Zinc, Total	496	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Aluminum, Total	25600	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Barium, Total	244	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Cadmium, Total	2.4	0.2	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Copper, Total	129	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Iron, Total	18800	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Lead, Total	89	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Manganese, Total	1460	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Mercury, Total	0.64	0.10	mg/kg - dry		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Vanadium, Total	25	1	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14030374-030	3/25/2014	Zinc, Total	349	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Aluminum, Total	9240	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Barium, Total	47	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Cadmium, Total	1.3	0.2	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Copper, Total	78	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Iron, Total	6740	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Lead, Total	43	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Manganese, Total	462	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Mercury, Total	0.18	0.10	mg/kg		SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Vanadium, Total	9	1	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Zinc, Total	232	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Aluminum, Total	11500	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Barium, Total	142	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Cadmium, Total	1.8	0.2	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Copper, Total	81	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Iron, Total	10300	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Lead, Total	76	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Manganese, Total	931	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Mercury, Total	0.26	0.10	mg/kg		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Zinc, Total	359	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Aluminum, Total	14800	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Barium, Total	132	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Copper, Total	52	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Iron, Total	10900	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Lead, Total	60	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Manganese, Total	1020	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Mercury, Total	0.37	0.10	mg/kg		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Zinc, Total	197	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Aluminum, Total	28900	10	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Arsenic, Total	20	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Barium, Total	146	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Boron, Total	8	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Cadmium, Total	4	0.5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Chromium, Total	17	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Copper, Total	245	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Iron, Total	21100	8	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Lead, Total	135	9	mg/kg - dry	J	SW6010B

SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Manganese, Total	1450	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Mercury, Total	0.57	0.10	mg/kg - dry	J	SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Nickel, Total	10	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Vanadium, Total	28	2	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14030374-031	3/25/2014	Zinc, Total	725	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Aluminum, Total	21600	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Arsenic, Total	16	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Barium, Total	266	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Cadmium, Total	3.4	0.2	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Copper, Total	152	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Iron, Total	19400	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Lead, Total	143	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Manganese, Total	1740	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Mercury, Total	0.49	0.10	mg/kg - dry		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Vanadium, Total	32	1	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14030374-032	3/25/2014	Zinc, Total	671	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Aluminum, Total	24800	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Arsenic, Total	14	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Barium, Total	221	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Cadmium, Total	1.6	0.2	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Copper, Total	87	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Iron, Total	18200	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Lead, Total	100	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Manganese, Total	1710	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Mercury, Total	0.63	0.10	mg/kg - dry		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Vanadium, Total	23	1	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14030374-033	3/25/2014	Zinc, Total	331	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Aluminum, Total	12500	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Barium, Total	83	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Cadmium, Total	2	0.2	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Copper, Total	85	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Iron, Total	9600	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Lead, Total	58	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Manganese, Total	627	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Mercury, Total	0.21	0.10	mg/kg		SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Zinc, Total	258	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Aluminum, Total	8220	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Barium, Total	117	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Cadmium, Total	1.5	0.2	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Copper, Total	77	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Iron, Total	12200	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Lead, Total	626	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Manganese, Total	788	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Mercury, Total	0.33	0.10	mg/kg		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Vanadium, Total	28	1	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Zinc, Total	272	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Aluminum, Total	14700	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Barium, Total	132	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Cadmium, Total	1.9	0.2	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Copper, Total	66	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Iron, Total	11300	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Lead, Total	61	5	mg/kg		SW6010B

SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Manganese, Total	1210	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Mercury, Total	0.4	0.10	mg/kg		SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Zinc, Total	192	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Aluminum, Total	38400	10	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Arsenic, Total	26	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Barium, Total	255	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Boron, Total	14	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Cadmium, Total	6.1	0.5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Chromium, Total	31	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Copper, Total	262	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Iron, Total	29500	9	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Lead, Total	177	10	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Manganese, Total	1930	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Mercury, Total	0.66	0.10	mg/kg - dry	J	SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Nickel, Total	18	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Vanadium, Total	45	2	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14030374-034	3/25/2014	Zinc, Total	795	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Aluminum, Total	13200	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Arsenic, Total	14	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Barium, Total	187	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Cadmium, Total	2.4	0.2	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Chromium, Total	13	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Copper, Total	124	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Iron, Total	19600	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Lead, Total	1010	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Manganese, Total	1270	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Mercury, Total	0.52	0.10	mg/kg - dry		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Vanadium, Total	46	1	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14030374-035	3/25/2014	Zinc, Total	437	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Aluminum, Total	22700	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Arsenic, Total	14	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Barium, Total	205	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Cadmium, Total	2.9	0.2	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Copper, Total	102	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Iron, Total	17500	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Lead, Total	94	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Manganese, Total	1870	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Mercury, Total	0.62	0.10	mg/kg - dry		SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14030374-036	3/25/2014	Zinc, Total	297	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Aluminum, Total	11800	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Arsenic, Total	7	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Barium, Total	43	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Cadmium, Total	1.2	0.2	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Copper, Total	59	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Iron, Total	8420	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Lead, Total	30	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Manganese, Total	326	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Zinc, Total	209	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Aluminum, Total	4630	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Barium, Total	64	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Copper, Total	28	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Iron, Total	18800	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Lead, Total	14	5	mg/kg		SW6010B

SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Manganese, Total	487	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Vanadium, Total	57	1	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Zinc, Total	107	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Aluminum, Total	5280	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Barium, Total	50	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Copper, Total	19	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Iron, Total	6750	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Lead, Total	10	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Manganese, Total	235	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Zinc, Total	69	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Aluminum, Total	35300	10	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Arsenic, Total	21	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Barium, Total	129	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Boron, Total	10	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Cadmium, Total	3.5	0.5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Copper, Total	176	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Iron, Total	25300	9	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Lead, Total	90	9	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Manganese, Total	978	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Mercury, Total	0.29	0.10	mg/kg - dry		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Nickel, Total	11	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Vanadium, Total	34	2	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14030374-037	3/25/2014	Zinc, Total	627	5	mg/kg - dry	J	SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Aluminum, Total	6120	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Arsenic, Total	5	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Barium, Total	84	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Copper, Total	37	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Iron, Total	24900	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Lead, Total	19	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Manganese, Total	644	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Vanadium, Total	75	1	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14030374-038	3/25/2014	Zinc, Total	142	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Aluminum, Total	6700	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Barium, Total	63	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Chromium, Total	5	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Copper, Total	25	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Iron, Total	8550	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Lead, Total	12	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Manganese, Total	298	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Vanadium, Total	15	1	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14030374-039	3/25/2014	Zinc, Total	88	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Aluminum, Total	8320	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Barium, Total	95	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Copper, Total	178	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Iron, Total	8460	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Lead, Total	65	5	mg/kg		SW6010B

SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Manganese, Total	592	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Mercury, Total	0.25	0.10	mg/kg		SW7471B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Zinc, Total	550	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Aluminum, Total	3980	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Arsenic, Total	5	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Barium, Total	84	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Copper, Total	41	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Iron, Total	9030	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Lead, Total	17	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Manganese, Total	288	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Vanadium, Total	24	1	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Zinc, Total	149	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Aluminum, Total	3900	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Barium, Total	91	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Copper, Total	31	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Iron, Total	5230	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Lead, Total	8	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Manganese, Total	322	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Zinc, Total	69	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Aluminum, Total	20000	7	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Arsenic, Total	27	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Barium, Total	227	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Boron, Total	12	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Cadmium, Total	7.1	0.2	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Chromium, Total	21	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Copper, Total	426	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Iron, Total	20300	7	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Lead, Total	157	7	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Manganese, Total	1420	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Mercury, Total	0.61	0.10	mg/kg - dry	J	SW7471B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Nickel, Total	12	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Vanadium, Total	42	2	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14030374-040	3/25/2014	Zinc, Total	1320	5	mg/kg - dry	J	SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Aluminum, Total	5000	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Barium, Total	106	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Cadmium, Total	1.3	0.2	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Copper, Total	52	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Iron, Total	11300	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Lead, Total	21	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Manganese, Total	362	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Vanadium, Total	30	1	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14030374-041	3/25/2014	Zinc, Total	188	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Aluminum, Total	4970	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Barium, Total	116	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Copper, Total	40	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Iron, Total	6660	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Lead, Total	10	5	mg/kg - dry		SW6010B

SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Manganese, Total	409	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Vanadium, Total	14	1	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14030374-042	3/25/2014	Zinc, Total	88	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Aluminum, Total	7920	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Barium, Total	106	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Cadmium, Total	1.9	0.2	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Copper, Total	108	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Iron, Total	7200	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Lead, Total	45	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Manganese, Total	757	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Mercury, Total	0.2	0.10	mg/kg		SW7471B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Zinc, Total	317	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Aluminum, Total	3440	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Barium, Total	83	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Copper, Total	26	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Iron, Total	5650	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Lead, Total	11	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Manganese, Total	276	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Vanadium, Total	13	1	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Zinc, Total	90	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Aluminum, Total	3560	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Barium, Total	71	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Copper, Total	21	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Iron, Total	4510	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Lead, Total	7	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Manganese, Total	256	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Vanadium, Total	9	1	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Zinc, Total	53	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Aluminum, Total	24100	9	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Arsenic, Total	30	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Barium, Total	322	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Boron, Total	13	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Cadmium, Total	5.7	0.2	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Chromium, Total	28	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Copper, Total	331	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Iron, Total	22000	8	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Lead, Total	137	9	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Manganese, Total	2310	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Mercury, Total	0.61	0.10	mg/kg - dry	J	SW7471B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Nickel, Total	16	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Vanadium, Total	49	2	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14030374-043	3/25/2014	Zinc, Total	967	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Aluminum, Total	4400	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Arsenic, Total	5	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Barium, Total	106	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Copper, Total	33	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Iron, Total	7240	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Lead, Total	14	5	mg/kg - dry		SW6010B

SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Manganese, Total	353	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Vanadium, Total	17	1	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14030374-044	3/25/2014	Zinc, Total	115	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Aluminum, Total	4520	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Barium, Total	91	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Copper, Total	27	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Iron, Total	5730	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Lead, Total	9	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Manganese, Total	325	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Vanadium, Total	11	1	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14030374-045	3/25/2014	Zinc, Total	68	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Aluminum, Total	9700	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Barium, Total	145	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Cadmium, Total	2.1	0.2	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Copper, Total	152	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Iron, Total	9000	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Lead, Total	52	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Manganese, Total	711	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Mercury, Total	0.22	0.10	mg/kg		SW7471B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Zinc, Total	471	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Aluminum, Total	4320	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Barium, Total	137	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Copper, Total	32	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Iron, Total	6500	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Lead, Total	13	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Manganese, Total	302	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Zinc, Total	176	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Aluminum, Total	5230	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Barium, Total	224	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Copper, Total	16	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Iron, Total	6740	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Lead, Total	7	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Manganese, Total	440	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Zinc, Total	77	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Aluminum, Total	27300	9	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Arsenic, Total	30	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Barium, Total	408	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Boron, Total	13	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Cadmium, Total	5.8	0.2	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Chromium, Total	25	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Copper, Total	427	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Iron, Total	25300	8	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Lead, Total	147	9	mg/kg - dry	J	SW6010B

SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Manganese, Total	2000	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Mercury, Total	0.61	0.10	mg/kg - dry	J	SW7471B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Nickel, Total	13	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Vanadium, Total	58	2	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14030374-046	3/24/2014	Zinc, Total	1320	5	mg/kg - dry	J	SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Aluminum, Total	5500	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Arsenic, Total	5	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Barium, Total	174	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Copper, Total	40	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Iron, Total	8270	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Lead, Total	17	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Manganese, Total	384	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14030374-047	3/24/2014	Zinc, Total	224	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Aluminum, Total	6520	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Barium, Total	280	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Copper, Total	20	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Iron, Total	8400	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Lead, Total	8	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Manganese, Total	549	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Vanadium, Total	19	1	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14030374-048	3/24/2014	Zinc, Total	96	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Aluminum, Total	9940	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Barium, Total	126	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Cadmium, Total	1.8	0.2	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Copper, Total	130	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Iron, Total	9500	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Lead, Total	42	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Manganese, Total	651	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Mercury, Total	0.2	0.10	mg/kg		SW7471B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Zinc, Total	431	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Aluminum, Total	3450	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Barium, Total	87	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Copper, Total	23	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Iron, Total	9310	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Lead, Total	11	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Manganese, Total	242	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Vanadium, Total	25	1	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Zinc, Total	105	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Aluminum, Total	3800	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Barium, Total	112	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Copper, Total	20	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Iron, Total	6830	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Lead, Total	13	5	mg/kg		SW6010B

SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Manganese, Total	366	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Zinc, Total	104	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Aluminum, Total	29700	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Antimony, Total	<5	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Arsenic, Total	28	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Barium, Total	377	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Boron, Total	14	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Cadmium, Total	5.3	0.2	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Chromium, Total	31	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Copper, Total	387	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Iron, Total	28400	9	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Lead, Total	124	10	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Manganese, Total	1940	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Mercury, Total	0.59	0.10	mg/kg - dry	J	SW7471B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Nickel, Total	18	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Vanadium, Total	60	2	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14030374-049	3/24/2014	Zinc, Total	1290	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Aluminum, Total	4370	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Barium, Total	110	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Copper, Total	30	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Iron, Total	11800	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Lead, Total	14	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Manganese, Total	306	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Vanadium, Total	32	1	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14030374-050	3/24/2014	Zinc, Total	133	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Aluminum, Total	4920	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Barium, Total	144	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Copper, Total	26	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Iron, Total	8840	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Lead, Total	17	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Manganese, Total	473	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14030374-051	3/24/2014	Zinc, Total	135	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Aluminum, Total	11000	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Arsenic, Total	38	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Barium, Total	177	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Boron, Total	6	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Cadmium, Total	3.5	0.2	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Copper, Total	492	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Iron, Total	11600	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Lead, Total	140	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Manganese, Total	702	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Mercury, Total	1	0.10	mg/kg		SW7471B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Vanadium, Total	23	1	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Zinc, Total	713	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Aluminum, Total	4430	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Arsenic, Total	28	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Barium, Total	106	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Cadmium, Total	1.5	0.2	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Copper, Total	162	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Iron, Total	10200	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Lead, Total	66	5	mg/kg		SW6010B

SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Manganese, Total	524	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Mercury, Total	0.36	0.10	mg/kg		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Zinc, Total	480	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Aluminum, Total	5480	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Arsenic, Total	27	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Barium, Total	116	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Chromium, Total	22	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Copper, Total	138	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Iron, Total	9190	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Lead, Total	47	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Manganese, Total	379	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Mercury, Total	0.15	0.10	mg/kg		SW7471B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Zinc, Total	159	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Aluminum, Total	29900	9	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Arsenic, Total	103	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Barium, Total	480	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Boron, Total	16	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Cadmium, Total	9.6	0.2	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Chromium, Total	33	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Copper, Total	1330	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Iron, Total	31300	8	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Lead, Total	379	8	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Manganese, Total	1900	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Mercury, Total	2.8	0.27	mg/kg - dry	J	SW7471B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Nickel, Total	18	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Silver, Total	7	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Vanadium, Total	63	2	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14030374-052	3/24/2014	Zinc, Total	1930	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Aluminum, Total	5630	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Arsenic, Total	35	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Barium, Total	135	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Cadmium, Total	1.9	0.2	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Chromium, Total	17	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Copper, Total	206	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Iron, Total	13000	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Lead, Total	83	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Manganese, Total	667	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Mercury, Total	0.45	0.10	mg/kg - dry		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Vanadium, Total	26	1	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14030374-053	3/24/2014	Zinc, Total	611	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Aluminum, Total	7200	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Arsenic, Total	35	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Barium, Total	152	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Chromium, Total	29	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Copper, Total	181	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Iron, Total	12100	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Lead, Total	62	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Manganese, Total	498	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Mercury, Total	0.2	0.10	mg/kg - dry		SW7471B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Nickel, Total	12	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Vanadium, Total	23	1	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14030374-054	3/24/2014	Zinc, Total	209	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Aluminum, Total	7070	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Barium, Total	59	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Copper, Total	25	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Iron, Total	5460	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Lead, Total	15	5	mg/kg		SW6010B

SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Manganese, Total	211	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Zinc, Total	30	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Aluminum, Total	6070	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Barium, Total	97	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Chromium, Total	13	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Copper, Total	17	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Iron, Total	14000	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Lead, Total	7	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Manganese, Total	116	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Vanadium, Total	41	1	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Zinc, Total	24	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Aluminum, Total	7280	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Arsenic, Total	16	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Barium, Total	81	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Copper, Total	20	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Iron, Total	9870	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Lead, Total	7	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Manganese, Total	111	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Zinc, Total	64	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Aluminum, Total	23500	10	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Arsenic, Total	35	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Barium, Total	196	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Boron, Total	12	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Cadmium, Total	1.4	0.5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Chromium, Total	30	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Copper, Total	83	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Iron, Total	18200	10	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Lead, Total	51	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Manganese, Total	699	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Mercury, Total	0.24	0.10	mg/kg - dry	J	SW7471B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Nickel, Total	18	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Vanadium, Total	40	1	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14030371-010	3/24/2014	Zinc, Total	100	5	mg/kg - dry	J	SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Aluminum, Total	8370	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Arsenic, Total	20	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Barium, Total	134	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Copper, Total	23	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Iron, Total	19300	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Lead, Total	10	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Manganese, Total	160	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Vanadium, Total	57	1	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14030371-011	3/24/2014	Zinc, Total	33	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Aluminum, Total	9500	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Arsenic, Total	21	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Barium, Total	106	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Cadmium, Total	0.2	0.2	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Copper, Total	26	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Iron, Total	12900	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Lead, Total	9	5	mg/kg - dry		SW6010B

SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Manganese, Total	145	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Vanadium, Total	25	1	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14030371-012	3/24/2014	Zinc, Total	83	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Aluminum, Total	12600	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Arsenic, Total	32	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Barium, Total	184	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Boron, Total	5	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Cadmium, Total	2.6	0.2	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Chromium, Total	18	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Copper, Total	312	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Iron, Total	13300	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Lead, Total	109	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Manganese, Total	803	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Mercury, Total	0.63	0.10	mg/kg		SW7471B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Vanadium, Total	26	1	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Zinc, Total	423	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Aluminum, Total	4090	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Arsenic, Total	38	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Barium, Total	107	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Cadmium, Total	2.2	0.2	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Copper, Total	146	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Iron, Total	15700	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Lead, Total	60	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Manganese, Total	497	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Mercury, Total	0.28	0.10	mg/kg		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Molybdenum, Total	7	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Vanadium, Total	37	1	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Zinc, Total	712	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Aluminum, Total	5010	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Arsenic, Total	33	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Barium, Total	112	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Chromium, Total	15	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Copper, Total	154	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Iron, Total	11900	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Lead, Total	60	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Manganese, Total	452	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Mercury, Total	0.13	0.10	mg/kg		SW7471B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Zinc, Total	204	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Aluminum, Total	28500	7	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Arsenic, Total	73	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Barium, Total	419	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Boron, Total	12	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Cadmium, Total	5.9	0.2	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Chromium, Total	40	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Copper, Total	710	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Iron, Total	30200	6	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Lead, Total	247	7	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Manganese, Total	1820	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Mercury, Total	1.4	0.22	mg/kg - dry	J	SW7471B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Nickel, Total	22	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Vanadium, Total	60	2	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14030374-055	3/24/2014	Zinc, Total	962	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Aluminum, Total	5200	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Arsenic, Total	49	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Barium, Total	137	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Cadmium, Total	2.8	0.2	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Chromium, Total	17	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Copper, Total	186	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Iron, Total	19900	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Lead, Total	77	5	mg/kg - dry	J	SW6010B

SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Manganese, Total	632	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Mercury, Total	0.35	0.10	mg/kg - dry		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Molybdenum, Total	9	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Vanadium, Total	47	1	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14030374-056	3/24/2014	Zinc, Total	906	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Aluminum, Total	6180	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Arsenic, Total	41	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Barium, Total	138	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Copper, Total	190	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Iron, Total	14700	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Lead, Total	74	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Manganese, Total	557	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Mercury, Total	0.16	0.10	mg/kg - dry		SW7471B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Vanadium, Total	21	1	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14030374-057	3/24/2014	Zinc, Total	251	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Aluminum, Total	12400	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Arsenic, Total	41	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Barium, Total	151	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Cadmium, Total	2.1	0.2	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Chromium, Total	19	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Copper, Total	303	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Iron, Total	16100	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Lead, Total	156	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Manganese, Total	1010	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Mercury, Total	0.8	0.10	mg/kg		SW7471B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Vanadium, Total	38	1	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Zinc, Total	571	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Aluminum, Total	3470	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Arsenic, Total	28	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Barium, Total	76	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Copper, Total	108	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Iron, Total	18700	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Lead, Total	53	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Manganese, Total	417	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Mercury, Total	0.19	0.10	mg/kg		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Vanadium, Total	55	1	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Zinc, Total	377	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Aluminum, Total	3590	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Arsenic, Total	33	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Barium, Total	68	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Copper, Total	97	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Iron, Total	8000	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Lead, Total	42	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Manganese, Total	409	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Zinc, Total	245	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Aluminum, Total	32800	8	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Arsenic, Total	109	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Barium, Total	399	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Boron, Total	11	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Cadmium, Total	5.7	0.2	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Chromium, Total	51	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Copper, Total	801	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Iron, Total	42400	7	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Lead, Total	413	8	mg/kg - dry	J	SW6010B

SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Manganese, Total	2660	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Mercury, Total	2.1	0.26	mg/kg - dry	J	SW7471B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Nickel, Total	25	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Silver, Total	5	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Vanadium, Total	100	2	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14030374-058	3/24/2014	Zinc, Total	1510	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Aluminum, Total	4330	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Arsenic, Total	35	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Barium, Total	95	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Copper, Total	135	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Iron, Total	23300	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Lead, Total	67	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Manganese, Total	521	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Mercury, Total	0.24	0.10	mg/kg - dry		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Vanadium, Total	69	1	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14030374-059	3/24/2014	Zinc, Total	471	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Aluminum, Total	4510	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Arsenic, Total	42	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Barium, Total	86	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Copper, Total	122	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Iron, Total	10100	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Lead, Total	53	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Manganese, Total	514	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Vanadium, Total	24	1	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14030374-060	3/24/2014	Zinc, Total	308	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Aluminum, Total	10500	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Arsenic, Total	29	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Barium, Total	145	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Chromium, Total	25	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Copper, Total	263	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Iron, Total	16900	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Lead, Total	106	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Manganese, Total	876	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Mercury, Total	0.46	0.10	mg/kg		SW7471B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Nickel, Total	12	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Vanadium, Total	48	1	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Zinc, Total	513	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Aluminum, Total	2910	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Barium, Total	62	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Copper, Total	52	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Iron, Total	12300	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Lead, Total	22	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Manganese, Total	317	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Mercury, Total	0.15	0.10	mg/kg		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Vanadium, Total	36	1	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Zinc, Total	202	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Aluminum, Total	2660	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Antimony, Total		5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Arsenic, Total	16	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Barium, Total	51	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Cadmium, Total		0.2	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Copper, Total	50	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Iron, Total	7070	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Lead, Total	21	5	mg/kg		SW6010B

SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Manganese, Total	296	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Molybdenum, Total		5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Selenium, Total		5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Silver, Total		5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Uranium, Total		5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Zinc, Total	105	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Aluminum, Total	25500	8	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Arsenic, Total	70	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Barium, Total	354	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Boron, Total	10	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Cadmium, Total	6.1	0.2	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Chromium, Total	61	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Copper, Total	640	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Iron, Total	41100	7	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Lead, Total	259	8	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Manganese, Total	2130	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Mercury, Total	1.1	0.10	mg/kg - dry	J	SW7471B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Nickel, Total	29	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Vanadium, Total	116	2	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14030374-061	3/24/2014	Zinc, Total	1250	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Aluminum, Total	3660	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Barium, Total	78	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Copper, Total	66	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Iron, Total	15500	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Lead, Total	27	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Manganese, Total	398	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Mercury, Total	0.19	0.10	mg/kg - dry		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Vanadium, Total	46	1	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14030374-062	3/24/2014	Zinc, Total	254	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Aluminum, Total	3110	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Barium, Total	59	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Copper, Total	88	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Iron, Total	8270	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Lead, Total	25	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Manganese, Total	346	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Vanadium, Total	18	1	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14030374-063	3/24/2014	Zinc, Total	123	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Aluminum, Total	13200	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Arsenic, Total	60	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Barium, Total	166	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Cadmium, Total	9.4	0.2	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Chromium, Total	21	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Copper, Total	1510	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Iron, Total	20200	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Lead, Total	164	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Manganese, Total	472	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Mercury, Total	1.5	0.10	mg/kg		SW7471B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Uranium, Total	8	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Vanadium, Total	38	1	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Zinc, Total	1090	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Aluminum, Total	3930	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Barium, Total	109	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Copper, Total	122	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Iron, Total	7070	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Lead, Total	33	5	mg/kg		SW6010B

SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Manganese, Total	204	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Mercury, Total	0.21	0.10	mg/kg		SW7471B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Zinc, Total	174	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Aluminum, Total	4010	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Antimony, Total		5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Barium, Total	132	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Cadmium, Total		0.2	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Copper, Total	66	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Iron, Total	6610	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Lead, Total	38	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Manganese, Total	190	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Molybdenum, Total		5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Selenium, Total		5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Silver, Total		5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Uranium, Total		5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Zinc, Total	110	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Aluminum, Total	27600	7	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Arsenic, Total	127	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Barium, Total	348	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Boron, Total	8	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Cadmium, Total	19.8	0.2	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Chromium, Total	44	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Copper, Total	3170	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Iron, Total	42500	6	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Lead, Total	345	7	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Manganese, Total	990	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Mercury, Total	3.2	0.21	mg/kg - dry	J	SW7471B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Molybdenum, Total	7	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Nickel, Total	21	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Silver, Total	6	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Uranium, Total	16	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Vanadium, Total	80	2	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14030374-064	3/24/2014	Zinc, Total	2290	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Aluminum, Total	4890	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Barium, Total	135	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Copper, Total	152	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Iron, Total	8790	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Lead, Total	42	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Manganese, Total	253	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Mercury, Total	0.26	0.10	mg/kg - dry		SW7471B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Vanadium, Total	23	1	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14030374-065	3/24/2014	Zinc, Total	216	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Aluminum, Total	5320	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Arsenic, Total	16	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Barium, Total	175	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Chromium, Total	14	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Copper, Total	88	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Iron, Total	8780	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Lead, Total	50	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Manganese, Total	252	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Mercury, Total	0.11	0.10	mg/kg - dry		SW7471B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Vanadium, Total	22	1	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14030374-066	3/24/2014	Zinc, Total	146	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Aluminum, Total	12000	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Arsenic, Total	23	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Barium, Total	153	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Chromium, Total	57	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Copper, Total	169	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Iron, Total	16100	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Lead, Total	85	5	mg/kg		SW6010B

SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Manganese, Total	542	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Molybdenum, Total	8	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Nickel, Total	27	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Vanadium, Total	51	1	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Zinc, Total	199	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Aluminum, Total	2760	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Barium, Total	39	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Copper, Total	27	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Iron, Total	10600	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Lead, Total	14	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Manganese, Total	109	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Vanadium, Total	31	1	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Zinc, Total	138	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Aluminum, Total	2380	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Barium, Total	26	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Copper, Total	13	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Iron, Total	3680	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Lead, Total	6	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Manganese, Total	152	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Zinc, Total	19	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Aluminum, Total	26600	7	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Arsenic, Total	51	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Barium, Total	341	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Boron, Total	10	10	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Cadmium, Total	2.3	0.3	mg/kg - dry	J	SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Chromium, Total	126	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Cobalt, Total	11	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Copper, Total	376	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Iron, Total	35700	6	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Lead, Total	189	7	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Manganese, Total	1210	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Mercury, Total	0.17	0.10	mg/kg - dry		SW7471B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Molybdenum, Total	19	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Nickel, Total	60	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Uranium, Total	9	5	mg/kg - dry		SW6020

SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Vanadium, Total	113	1	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14060105-006	6/3/2014	Zinc, Total	442	5	mg/kg - dry	J	SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Aluminum, Total	3510	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Barium, Total	50	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Cadmium, Total	0.2	0.2	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Copper, Total	34	5	mg/kg - dry	J	SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Iron, Total	13400	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Lead, Total	18	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Manganese, Total	139	5	mg/kg - dry	J	SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Vanadium, Total	39	1	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14060105-007	6/3/2014	Zinc, Total	175	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Aluminum, Total	2830	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Barium, Total	30	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Copper, Total	16	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Iron, Total	4370	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Lead, Total	7	5	mg/kg - dry		SW6010B

SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Manganese, Total	181	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Vanadium, Total	13	1	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14060105-008	6/3/2014	Zinc, Total	23	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Aluminum, Total	8840	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Arsenic, Total	110	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Barium, Total	140	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Cadmium, Total	6	0.2	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Chromium, Total	52	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Copper, Total	1080	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Iron, Total	16300	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Lead, Total	279	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Manganese, Total	672	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Mercury, Total	0.44	0.10	mg/kg		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Molybdenum, Total	7	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Nickel, Total	23	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Uranium, Total	8	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Vanadium, Total	38	1	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Zinc, Total	1190	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Aluminum, Total	4080	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Arsenic, Total	64	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Barium, Total	63	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Chromium, Total	30	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Cobalt, Total	11	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Copper, Total	679	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Iron, Total	48100	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Lead, Total	171	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Manganese, Total	617	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Mercury, Total	0.12	0.10	mg/kg		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Nickel, Total	15	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Vanadium, Total	70	1	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Zinc, Total	1100	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Aluminum, Total	3380	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Arsenic, Total	61	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Barium, Total	65	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Cadmium, Total	1.5	0.2	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Copper, Total	535	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Iron, Total	13600	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Lead, Total	153	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Manganese, Total	858	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Zinc, Total	936	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Aluminum, Total	24000	10	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Arsenic, Total	300	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Barium, Total	381	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Cadmium, Total	16.3	0.2	mg/kg - dry	J	SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Chromium, Total	142	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Cobalt, Total	13	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Copper, Total	2940	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Iron, Total	44400	8	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Lead, Total	759	8	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Manganese, Total	1830	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Mercury, Total	1.2	0.10	mg/kg - dry	J	SW7471B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Molybdenum, Total	20	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Nickel, Total	63	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Silver, Total	8	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Uranium, Total	22	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Vanadium, Total	104	2	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14060105-009	6/3/2014	Zinc, Total	3230	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Aluminum, Total	5220	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Arsenic, Total	81	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Barium, Total	80	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Cadmium, Total	3.2	0.2	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Chromium, Total	39	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Copper, Total	867	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Iron, Total	61500	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Lead, Total	219	5	mg/kg - dry	J	SW6010B

SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Manganese, Total	788	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Mercury, Total	0.16	0.10	mg/kg - dry		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Nickel, Total	19	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Vanadium, Total	90	1	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14060105-010	6/3/2014	Zinc, Total	1410	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Aluminum, Total	4080	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Arsenic, Total	73	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Barium, Total	78	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Cadmium, Total	1.8	0.2	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Copper, Total	646	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Iron, Total	16400	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Lead, Total	184	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Manganese, Total	1040	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Mercury, Total	0.1	0.10	mg/kg - dry		SW7471B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Vanadium, Total	23	1	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14060105-011	6/3/2014	Zinc, Total	1130	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Aluminum, Total	8640	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Arsenic, Total	32	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Barium, Total	111	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Cadmium, Total	3	0.2	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Chromium, Total	15	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Copper, Total	334	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Iron, Total	12300	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Lead, Total	164	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Manganese, Total	639	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Mercury, Total	0.38	0.10	mg/kg		SW7471B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Molybdenum, Total	8	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Vanadium, Total	34	1	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Zinc, Total	831	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Aluminum, Total	4080	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Arsenic, Total	21	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Barium, Total	64	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Copper, Total	215	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Iron, Total	17200	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Lead, Total	50	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Manganese, Total	353	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Mercury, Total	0.21	0.10	mg/kg		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Vanadium, Total	36	1	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Zinc, Total	387	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Aluminum, Total	2160	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Barium, Total	41	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Copper, Total	76	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Iron, Total	6100	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Lead, Total	22	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Manganese, Total	342	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Zinc, Total	215	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Aluminum, Total	21000	9	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Arsenic, Total	85	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Barium, Total	268	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Cadmium, Total	7.3	0.2	mg/kg - dry	J	SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Chromium, Total	38	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Cobalt, Total	12	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Copper, Total	810	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Iron, Total	29700	8	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Lead, Total	398	8	mg/kg - dry		SW6010B

SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Manganese, Total	1550	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Mercury, Total	0.92	0.10	mg/kg - dry	J	SW7471B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Molybdenum, Total	18	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Nickel, Total	22	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Silver, Total	5	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Vanadium, Total	82	2	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14060106-017	6/3/2014	Zinc, Total	2010	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Aluminum, Total	5460	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Arsenic, Total	28	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Barium, Total	85	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Cadmium, Total	1.5	0.2	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Copper, Total	288	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Iron, Total	23000	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Lead, Total	66	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Manganese, Total	473	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Mercury, Total	0.28	0.10	mg/kg - dry		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Vanadium, Total	48	1	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14060106-018	6/3/2014	Zinc, Total	518	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Aluminum, Total	2430	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Arsenic, Total	19	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Barium, Total	47	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Copper, Total	86	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Iron, Total	6890	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Lead, Total	24	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Manganese, Total	386	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Vanadium, Total	16	1	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14060106-019	6/3/2014	Zinc, Total	243	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Aluminum, Total	10800	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Arsenic, Total	43	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Barium, Total	176	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Cadmium, Total	3.9	0.2	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Chromium, Total	22	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Cobalt, Total	7	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Copper, Total	407	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Iron, Total	15200	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Lead, Total	206	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Manganese, Total	1720	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Mercury, Total	0.44	0.10	mg/kg		SW7471B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Molybdenum, Total	7	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Nickel, Total	12	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Vanadium, Total	47	1	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Zinc, Total	968	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Aluminum, Total	4100	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Barium, Total	70	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Copper, Total	108	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Iron, Total	8410	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Lead, Total	54	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Manganese, Total	628	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Mercury, Total	0.17	0.10	mg/kg		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Zinc, Total	353	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Aluminum, Total	3090	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Barium, Total	80	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Copper, Total	57	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Iron, Total	6600	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Lead, Total	35	5	mg/kg		SW6010B

SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Manganese, Total	549	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Zinc, Total	178	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Aluminum, Total	23900	7	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Arsenic, Total	106	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Barium, Total	391	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Cadmium, Total	8.5	0.2	mg/kg - dry	J	SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Chromium, Total	49	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Cobalt, Total	15	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Copper, Total	901	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Iron, Total	33600	7	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Lead, Total	456	7	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Manganese, Total	3800	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Mercury, Total	0.97	0.10	mg/kg - dry	J	SW7471B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Molybdenum, Total	15	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Nickel, Total	27	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Silver, Total	6	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Vanadium, Total	104	2	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14060106-020	6/3/2014	Zinc, Total	2140	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Aluminum, Total	5550	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Arsenic, Total	17	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Barium, Total	94	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Copper, Total	146	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Iron, Total	11400	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Lead, Total	72	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Manganese, Total	850	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Mercury, Total	0.24	0.10	mg/kg - dry		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14060106-021	6/3/2014	Zinc, Total	478	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Aluminum, Total	3820	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Barium, Total	99	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Copper, Total	71	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Iron, Total	8170	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Lead, Total	44	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Manganese, Total	679	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Vanadium, Total	19	1	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14060106-022	6/3/2014	Zinc, Total	220	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Aluminum, Total	6590	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Arsenic, Total	20	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Barium, Total	113	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Cadmium, Total	2.2	0.2	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Chromium, Total	55	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Copper, Total	240	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Iron, Total	9680	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Lead, Total	137	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Manganese, Total	485	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Mercury, Total	0.45	0.10	mg/kg		SW7471B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Molybdenum, Total	5	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Nickel, Total	28	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Zinc, Total	507	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Aluminum, Total	5200	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Arsenic, Total	38	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Barium, Total	84	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Cadmium, Total	2.2	0.2	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Copper, Total	275	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Iron, Total	9580	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Lead, Total	71	5	mg/kg		SW6010B

SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Manganese, Total	346	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Mercury, Total	0.43	0.10	mg/kg		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Zinc, Total	415	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Aluminum, Total	2600	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Arsenic, Total	5	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Barium, Total	38	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Copper, Total	56	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Iron, Total	4820	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Lead, Total	21	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Manganese, Total	142	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Mercury, Total	0.22	0.10	mg/kg		SW7471B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Zinc, Total	100	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Aluminum, Total	25300	10	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Arsenic, Total	84	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Barium, Total	433	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Cadmium, Total	8.6	0.3	mg/kg - dry	J	SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Chromium, Total	210	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Cobalt, Total	15	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Copper, Total	924	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Iron, Total	37200	10	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Lead, Total	526	10	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Manganese, Total	1860	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Mercury, Total	1.7	0.10	mg/kg - dry	J	SW7471B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Molybdenum, Total	19	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Nickel, Total	108	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Silver, Total	5	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Uranium, Total	10	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Vanadium, Total	79	3	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14060106-023	6/3/2014	Zinc, Total	1950	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Aluminum, Total	9340	6	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Arsenic, Total	68	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Barium, Total	150	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Boron, Total	ND	8	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Cadmium, Total	4	0.2	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Copper, Total	494	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Iron, Total	17200	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Lead, Total	127	6	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Manganese, Total	622	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Mercury, Total	0.78	0.10	mg/kg - dry	J	SW7471B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Vanadium, Total	36	1	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14060106-024	6/3/2014	Zinc, Total	745	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Aluminum, Total	2960	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Barium, Total	43	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Copper, Total	64	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Iron, Total	5480	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Lead, Total	24	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Manganese, Total	161	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Mercury, Total	0.25	0.10	mg/kg - dry		SW7471B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Vanadium, Total	12	1	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14060106-025	6/3/2014	Zinc, Total	114	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Aluminum, Total	7190	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Barium, Total	74	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Cadmium, Total	2.6	0.2	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Chromium, Total	17	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Copper, Total	167	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Iron, Total	7130	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Lead, Total	62	5	mg/kg		SW6010B

SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Manganese, Total	406	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Mercury, Total	0.3	0.10	mg/kg		SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Zinc, Total	472	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Aluminum, Total	8150	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Barium, Total	117	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Cadmium, Total	2.4	0.2	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Copper, Total	161	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Iron, Total	11500	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Lead, Total	70	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Manganese, Total	562	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Mercury, Total	0.35	0.10	mg/kg		SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Vanadium, Total	26	1	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Zinc, Total	397	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Aluminum, Total	9670	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Arsenic, Total	7	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Barium, Total	134	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Cadmium, Total	1.2	0.2	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Copper, Total	63	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Iron, Total	8180	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Lead, Total	32	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Manganese, Total	563	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Mercury, Total	0.1	0.10	mg/kg		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Zinc, Total	184	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Aluminum, Total	32600	10	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Arsenic, Total	63	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Barium, Total	335	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Cadmium, Total	11.7	0.3	mg/kg - dry	J	SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Chromium, Total	78	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Cobalt, Total	15	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Copper, Total	757	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Iron, Total	32200	10	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Lead, Total	282	10	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Manganese, Total	1840	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Mercury, Total	1.4	0.10	mg/kg - dry	J	SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Molybdenum, Total	9	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Nickel, Total	46	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Uranium, Total	10	5	mg/kg - dry		SW6020

SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Vanadium, Total	67	3	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14060106-026	6/3/2014	Zinc, Total	2140	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Aluminum, Total	18500	7	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Arsenic, Total	26	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Barium, Total	265	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Cadmium, Total	5.5	0.2	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Cobalt, Total	10	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Copper, Total	367	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Iron, Total	26000	6	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Lead, Total	159	7	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Manganese, Total	1280	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Mercury, Total	0.79	0.10	mg/kg - dry	J	SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Nickel, Total	11	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Vanadium, Total	60	2	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14060106-027	6/3/2014	Zinc, Total	901	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Aluminum, Total	17100	6	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Arsenic, Total	12	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Barium, Total	236	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Boron, Total	ND	8	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Cadmium, Total	2.1	0.2	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Copper, Total	112	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Iron, Total	14400	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Lead, Total	56	6	mg/kg - dry		SW6010B

SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Manganese, Total	993	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Mercury, Total	0.18	0.10	mg/kg - dry		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Vanadium, Total	25	1	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14060106-028	6/3/2014	Zinc, Total	325	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Aluminum, Total	8000	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Barium, Total	103	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Chromium, Total	21	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Copper, Total	169	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Iron, Total	9380	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Lead, Total	68	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Manganese, Total	515	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Mercury, Total	0.24	0.10	mg/kg		SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Nickel, Total	11	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Zinc, Total	429	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Aluminum, Total	8240	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Barium, Total	119	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Cadmium, Total	2.4	0.2	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Copper, Total	142	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Iron, Total	15100	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Lead, Total	45	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Manganese, Total	487	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Mercury, Total	0.24	0.10	mg/kg		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Vanadium, Total	38	1	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Zinc, Total	367	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Aluminum, Total	10700	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Barium, Total	119	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Copper, Total	45	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Iron, Total	9080	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Lead, Total	34	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Manganese, Total	719	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Mercury, Total	0.15	0.10	mg/kg		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Vanadium, Total	13	1	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Zinc, Total	198	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Aluminum, Total	24600	9	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Arsenic, Total	43	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Barium, Total	316	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Boron, Total	8	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Cadmium, Total	7.7	0.4	mg/kg - dry	J	SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Chromium, Total	65	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Cobalt, Total	12	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Copper, Total	520	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Iron, Total	28800	8	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Lead, Total	209	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Manganese, Total	1580	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Mercury, Total	0.74	0.10	mg/kg - dry	J	SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Molybdenum, Total	7	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Nickel, Total	34	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Vanadium, Total	55	2	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14060106-032	6/3/2014	Zinc, Total	1320	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Aluminum, Total	16300	6	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Arsenic, Total	20	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Barium, Total	236	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Boron, Total	6	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Cadmium, Total	4.7	0.3	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Chromium, Total	24	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Copper, Total	281	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Iron, Total	29900	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Lead, Total	90	5	mg/kg - dry	J	SW6010B

SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Manganese, Total	966	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Mercury, Total	0.47	0.10	mg/kg - dry		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Nickel, Total	10	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Vanadium, Total	76	1	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14060106-033	6/3/2014	Zinc, Total	712	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Aluminum, Total	18000	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Arsenic, Total	13	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Barium, Total	201	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Cadmium, Total	1.5	0.3	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Copper, Total	76	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Iron, Total	15300	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Lead, Total	58	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Manganese, Total	1210	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Mercury, Total	0.26	0.10	mg/kg - dry		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Vanadium, Total	22	1	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14060106-034	6/3/2014	Zinc, Total	334	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Aluminum, Total	9200	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Barium, Total	102	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Cadmium, Total	1.9	0.2	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Chromium, Total	21	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Copper, Total	142	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Iron, Total	10400	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Lead, Total	72	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Manganese, Total	471	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Mercury, Total	0.33	0.10	mg/kg		SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Vanadium, Total	22	1	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Zinc, Total	349	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Aluminum, Total	7580	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Barium, Total	120	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Cadmium, Total	2.1	0.2	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Copper, Total	113	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Iron, Total	12700	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Lead, Total	51	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Manganese, Total	458	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Mercury, Total	0.26	0.10	mg/kg		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Vanadium, Total	30	1	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Zinc, Total	275	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Aluminum, Total	9990	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Barium, Total	149	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Copper, Total	43	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Iron, Total	8430	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Lead, Total	24	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Manganese, Total	420	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Mercury, Total	0.44	0.10	mg/kg		SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Zinc, Total	181	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Aluminum, Total	30200	10	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Arsenic, Total	50	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Barium, Total	337	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Boron, Total	15	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Cadmium, Total	6.2	0.5	mg/kg - dry	J	SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Chromium, Total	68	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Cobalt, Total	13	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Copper, Total	465	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Iron, Total	34300	10	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Lead, Total	236	5	mg/kg - dry		SW6010B

SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Manganese, Total	1550	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Mercury, Total	1.1	0.10	mg/kg - dry	J	SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Molybdenum, Total	5	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Nickel, Total	34	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Vanadium, Total	71	3	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14060106-035	6/3/2014	Zinc, Total	1150	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Aluminum, Total	13400	6	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Arsenic, Total	17	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Barium, Total	214	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Boron, Total	6	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Cadmium, Total	3.7	0.3	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Copper, Total	201	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Iron, Total	22500	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Lead, Total	90	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Manganese, Total	812	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Mercury, Total	0.46	0.10	mg/kg - dry		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Vanadium, Total	52	1	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14060106-036	6/3/2014	Zinc, Total	488	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Aluminum, Total	15700	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Arsenic, Total	14	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Barium, Total	234	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Cadmium, Total	1.5	0.3	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Chromium, Total	6	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Copper, Total	68	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Iron, Total	13200	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Lead, Total	38	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Manganese, Total	659	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Mercury, Total	0.69	0.10	mg/kg - dry	J	SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Vanadium, Total	17	1	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14060106-037	6/3/2014	Zinc, Total	283	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Aluminum, Total	11500	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Barium, Total	76	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Cadmium, Total	4.1	0.2	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Chromium, Total	79	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Copper, Total	109	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Iron, Total	11000	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Lead, Total	97	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Manganese, Total	345	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Mercury, Total	0.15	0.10	mg/kg		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Nickel, Total	33	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Zinc, Total	285	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Aluminum, Total	4580	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Barium, Total	50	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Chromium, Total	18	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Copper, Total	76	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Iron, Total	23700	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Lead, Total	17	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Manganese, Total	166	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Vanadium, Total	73	1	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Zinc, Total	128	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Aluminum, Total	2990	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Barium, Total	31	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Copper, Total	16	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Iron, Total	3800	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Lead, Total	7	5	mg/kg		SW6010B

SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Manganese, Total	92	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Vanadium, Total	8	1	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Zinc, Total	60	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Aluminum, Total	47600	10	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Arsenic, Total	47	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Barium, Total	315	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Boron, Total	11	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Cadmium, Total	17.2	0.7	mg/kg - dry	J	SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Chromium, Total	329	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Cobalt, Total	17	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Copper, Total	451	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Iron, Total	45700	10	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Lead, Total	400	9	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Manganese, Total	1430	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Mercury, Total	0.61	0.10	mg/kg - dry	J	SW7471B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Molybdenum, Total	13	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Nickel, Total	138	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Uranium, Total	12	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Vanadium, Total	78	3	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14060106-029	6/3/2014	Zinc, Total	1180	5	mg/kg - dry	J	SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Aluminum, Total	6470	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Arsenic, Total	7	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Barium, Total	71	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Cadmium, Total	1.3	0.2	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Chromium, Total	25	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Copper, Total	108	5	mg/kg - dry	J	SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Iron, Total	33400	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Lead, Total	25	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Manganese, Total	234	5	mg/kg - dry	J	SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Vanadium, Total	103	1	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14060106-030	6/3/2014	Zinc, Total	181	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Aluminum, Total	3710	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Barium, Total	39	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Chromium, Total	5	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Copper, Total	20	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Iron, Total	4720	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Lead, Total	8	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Manganese, Total	114	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Vanadium, Total	10	1	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14060106-031	6/3/2014	Zinc, Total	74	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Aluminum, Total	6050	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Barium, Total	68	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Cadmium, Total	1.8	0.2	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Chromium, Total	46	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Copper, Total	112	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Iron, Total	6350	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Lead, Total	41	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Manganese, Total	530	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Mercury, Total	0.14	0.10	mg/kg		SW7471B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Nickel, Total	21	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Zinc, Total	367	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Aluminum, Total	3970	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Barium, Total	74	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Chromium, Total	19	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Copper, Total	33	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Iron, Total	25800	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Lead, Total	12	5	mg/kg		SW6010B

SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Manganese, Total	249	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Vanadium, Total	85	1	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Zinc, Total	117	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Aluminum, Total	2640	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Barium, Total	38	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Copper, Total	8	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Iron, Total	3580	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Lead, Total	6	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Manganese, Total	102	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Vanadium, Total	7	1	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Zinc, Total	46	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Aluminum, Total	22900	10	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Arsenic, Total	38	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Barium, Total	258	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Boron, Total	12	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Cadmium, Total	6.8	0.6	mg/kg - dry	J	SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Chromium, Total	175	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Cobalt, Total	12	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Copper, Total	425	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Iron, Total	24000	10	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Lead, Total	155	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Manganese, Total	2010	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Mercury, Total	0.55	0.10	mg/kg - dry	J	SW7471B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Molybdenum, Total	7	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Nickel, Total	80	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Vanadium, Total	62	3	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14060106-038	6/3/2014	Zinc, Total	1390	5	mg/kg - dry	J	SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Aluminum, Total	5210	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Barium, Total	97	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Chromium, Total	25	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Copper, Total	44	5	mg/kg - dry	J	SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Iron, Total	33800	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Lead, Total	16	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Manganese, Total	327	5	mg/kg - dry	J	SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Vanadium, Total	111	1	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14060106-039	6/3/2014	Zinc, Total	154	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Aluminum, Total	3120	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Barium, Total	45	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Chromium, Total	6	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Copper, Total	9	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Iron, Total	4240	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Lead, Total	8	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Manganese, Total	120	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Vanadium, Total	9	1	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14060106-040	6/3/2014	Zinc, Total	54	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Aluminum, Total	8120	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Barium, Total	79	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Boron, Total	5	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Cadmium, Total	1.9	0.2	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Chromium, Total	68	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Copper, Total	93	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Iron, Total	7280	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Lead, Total	54	5	mg/kg		SW6010B

SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Manganese, Total	329	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Mercury, Total	0.16	0.10	mg/kg		SW7471B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Nickel, Total	37	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Zinc, Total	401	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Aluminum, Total	3870	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Barium, Total	89	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Copper, Total	21	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Iron, Total	8950	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Lead, Total	11	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Manganese, Total	109	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Vanadium, Total	26	1	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Zinc, Total	87	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Aluminum, Total	4380	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Barium, Total	91	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Copper, Total	18	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Iron, Total	5850	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Lead, Total	14	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Manganese, Total	168	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Zinc, Total	70	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Aluminum, Total	39700	20	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Arsenic, Total	57	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Barium, Total	389	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Boron, Total	25	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Cadmium, Total	9.3	0.7	mg/kg - dry	J	SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Chromium, Total	333	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Cobalt, Total	17	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Copper, Total	456	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Iron, Total	35600	10	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Lead, Total	265	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Manganese, Total	1610	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Mercury, Total	0.77	0.10	mg/kg - dry	J	SW7471B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Molybdenum, Total	12	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Nickel, Total	180	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Uranium, Total	22	5	mg/kg - dry		SW6020

SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Vanadium, Total	90	3	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14060106-041	6/3/2014	Zinc, Total	1960	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Aluminum, Total	5480	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Barium, Total	125	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Cadmium, Total	0.9	0.2	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Copper, Total	29	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Iron, Total	12700	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Lead, Total	16	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Manganese, Total	154	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Vanadium, Total	37	1	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14060106-042	6/3/2014	Zinc, Total	123	5	mg/kg - dry	J	SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Aluminum, Total	5790	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Barium, Total	121	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Copper, Total	24	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Iron, Total	7740	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Lead, Total	18	5	mg/kg - dry		SW6010B

SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Manganese, Total	222	5	mg/kg - dry	J	SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Vanadium, Total	18	1	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14060106-043	6/3/2014	Zinc, Total	92	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Aluminum, Total	8140	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Barium, Total	108	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Chromium, Total	49	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Copper, Total	70	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Iron, Total	7870	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Lead, Total	34	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Manganese, Total	438	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Mercury, Total	0.11	0.10	mg/kg		SW7471B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Nickel, Total	23	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Zinc, Total	377	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Aluminum, Total	4390	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Barium, Total	102	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Copper, Total	18	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Iron, Total	8780	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Lead, Total	10	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Manganese, Total	174	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Vanadium, Total	24	1	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Zinc, Total	87	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Aluminum, Total	3780	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Barium, Total	84	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Copper, Total	12	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Iron, Total	6040	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Lead, Total	7	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Manganese, Total	192	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Zinc, Total	116	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Aluminum, Total	23700	10	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Arsenic, Total	26	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Barium, Total	315	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Boron, Total	11	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Cadmium, Total	7.3	0.5	mg/kg - dry	J	SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Chromium, Total	143	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Cobalt, Total	11	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Copper, Total	205	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Iron, Total	22900	8	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Lead, Total	100	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Manganese, Total	1270	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Mercury, Total	0.33	0.10	mg/kg - dry		SW7471B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Nickel, Total	67	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Vanadium, Total	62	2	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14060106-044	6/2/2014	Zinc, Total	1100	5	mg/kg - dry	J	SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Aluminum, Total	6110	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Barium, Total	142	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Copper, Total	25	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Iron, Total	12200	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Lead, Total	13	5	mg/kg - dry		SW6010B

SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Manganese, Total	242	5	mg/kg - dry	J	SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Vanadium, Total	33	1	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14060106-045	6/2/2014	Zinc, Total	121	5	mg/kg - dry	J	SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Aluminum, Total	4480	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Barium, Total	99	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Copper, Total	14	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Iron, Total	7160	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Lead, Total	9	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Manganese, Total	228	5	mg/kg - dry	J	SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Vanadium, Total	14	1	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14060106-046	6/2/2014	Zinc, Total	138	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Aluminum, Total	7860	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Barium, Total	108	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Cadmium, Total	1.8	0.2	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Chromium, Total	47	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Copper, Total	129	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Iron, Total	8190	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Lead, Total	75	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Manganese, Total	479	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Mercury, Total	0.16	0.10	mg/kg		SW7471B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Nickel, Total	24	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Zinc, Total	435	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Aluminum, Total	3860	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Barium, Total	100	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Copper, Total	38	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Iron, Total	8390	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Lead, Total	16	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Manganese, Total	241	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Zinc, Total	129	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Aluminum, Total	2970	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Barium, Total	80	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Copper, Total	31	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Iron, Total	5160	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Lead, Total	15	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Manganese, Total	155	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Zinc, Total	89	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Aluminum, Total	31600	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Arsenic, Total	54	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Barium, Total	432	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Cadmium, Total	7	0.2	mg/kg - dry	J	SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Chromium, Total	188	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Cobalt, Total	15	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Copper, Total	518	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Iron, Total	32900	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Lead, Total	302	10	mg/kg - dry		SW6010B

SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Manganese, Total	1930	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Mercury, Total	0.64	0.10	mg/kg - dry	J	SW7471B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Molybdenum, Total	8	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Nickel, Total	96	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Vanadium, Total	76	3	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14060106-047	6/2/2014	Zinc, Total	1750	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Aluminum, Total	5410	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Barium, Total	141	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Copper, Total	53	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Iron, Total	11800	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Lead, Total	23	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Manganese, Total	338	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Vanadium, Total	30	1	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14060106-048	6/2/2014	Zinc, Total	182	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Aluminum, Total	3810	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Arsenic, Total	5	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Barium, Total	102	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Copper, Total	40	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Iron, Total	6610	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Lead, Total	19	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Manganese, Total	198	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Vanadium, Total	12	1	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14060106-049	6/2/2014	Zinc, Total	114	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Aluminum, Total	7360	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Arsenic, Total	32	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Barium, Total	114	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Chromium, Total	55	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Copper, Total	338	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Iron, Total	8900	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Lead, Total	119	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Manganese, Total	820	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Mercury, Total	0.51	0.10	mg/kg		SW7471B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Nickel, Total	28	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Zinc, Total	674	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Aluminum, Total	3500	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Arsenic, Total	38	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Barium, Total	90	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Cadmium, Total	2.8	0.2	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Copper, Total	206	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Iron, Total	21000	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Lead, Total	68	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Manganese, Total	575	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Mercury, Total	0.31	0.10	mg/kg		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Vanadium, Total	54	1	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Zinc, Total	981	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Aluminum, Total	3310	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Arsenic, Total	76	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Barium, Total	69	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Copper, Total	257	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Iron, Total	11100	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Lead, Total	91	5	mg/kg		SW6010B

SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Manganese, Total	335	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Mercury, Total	0.14	0.10	mg/kg		SW7471B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Zinc, Total	316	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Aluminum, Total	23200	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Arsenic, Total	102	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Barium, Total	360	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Cadmium, Total	9	0.2	mg/kg - dry	J	SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Chromium, Total	175	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Copper, Total	1060	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Iron, Total	28000	9	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Lead, Total	374	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Manganese, Total	2580	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Mercury, Total	1.6	0.10	mg/kg - dry	J	SW7471B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Nickel, Total	89	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Vanadium, Total	63	2	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14060106-050	6/2/2014	Zinc, Total	2120	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Aluminum, Total	5010	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Arsenic, Total	54	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Barium, Total	128	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Cadmium, Total	4	0.2	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Chromium, Total	20	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Copper, Total	295	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Iron, Total	30100	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Lead, Total	97	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Manganese, Total	824	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Mercury, Total	0.45	0.10	mg/kg - dry		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Vanadium, Total	77	1	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14060106-051	6/2/2014	Zinc, Total	1410	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Aluminum, Total	4020	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Arsenic, Total	93	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Barium, Total	84	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Chromium, Total	13	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Copper, Total	313	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Iron, Total	13500	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Lead, Total	111	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Manganese, Total	407	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Mercury, Total	0.18	0.10	mg/kg - dry		SW7471B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Vanadium, Total	22	1	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14060106-052	6/2/2014	Zinc, Total	384	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Aluminum, Total	14200	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Arsenic, Total	36	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Barium, Total	142	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Chromium, Total	25	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Copper, Total	52	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Iron, Total	14700	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Lead, Total	59	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Manganese, Total	215	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Mercury, Total	0.11	0.10	mg/kg		SW7471B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Nickel, Total	13	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Vanadium, Total	34	1	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Zinc, Total	40	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Aluminum, Total	8250	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Arsenic, Total	24	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Barium, Total	128	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Copper, Total	22	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Iron, Total	12900	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Lead, Total	6	5	mg/kg		SW6010B

SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Manganese, Total	134	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Vanadium, Total	34	1	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Zinc, Total	31	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Aluminum, Total	9560	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Arsenic, Total	25	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Barium, Total	214	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Chromium, Total	15	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Cobalt, Total	6	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Copper, Total	25	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Iron, Total	17700	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Lead, Total	6	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Manganese, Total	224	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Vanadium, Total	30	1	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Zinc, Total	37	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Aluminum, Total	28000	6	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Arsenic, Total	70	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Barium, Total	279	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Boron, Total	7	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Cadmium, Total	1	0.5	mg/kg - dry	J	SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Chromium, Total	49	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Copper, Total	103	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Iron, Total	28800	6	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Lead, Total	116	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Manganese, Total	423	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Mercury, Total	0.22	0.10	mg/kg - dry		SW7471B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Nickel, Total	25	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Vanadium, Total	66	1	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14060105-012	6/2/2014	Zinc, Total	79	5	mg/kg - dry	J	SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Aluminum, Total	10800	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Arsenic, Total	31	5	mg/kg - dry	J	SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Barium, Total	167	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Chromium, Total	14	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Copper, Total	28	5	mg/kg - dry	J	SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Iron, Total	16800	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Lead, Total	7	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Manganese, Total	176	5	mg/kg - dry	J	SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Nickel, Total	10	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Vanadium, Total	44	1	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14060105-013	6/2/2014	Zinc, Total	41	5	mg/kg - dry	J	SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Aluminum, Total	14200	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Arsenic, Total	37	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Barium, Total	319	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Cadmium, Total	0.2	0.2	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Chromium, Total	23	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Copper, Total	38	5	mg/kg - dry	J	SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Iron, Total	26400	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Lead, Total	8	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Manganese, Total	333	5	mg/kg - dry	J	SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Nickel, Total	14	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Vanadium, Total	44	1	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14060105-014	6/2/2014	Zinc, Total	55	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Aluminum, Total	11500	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Arsenic, Total	48	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Barium, Total	168	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Cadmium, Total	3	0.2	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Copper, Total	401	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Iron, Total	13600	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Lead, Total	148	5	mg/kg		SW6010B

SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Manganese, Total	618	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Mercury, Total	0.75	0.10	mg/kg		SW7471B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Vanadium, Total	29	1	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Zinc, Total	608	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Aluminum, Total	5800	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Arsenic, Total	34	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Barium, Total	106	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Copper, Total	93	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Iron, Total	13200	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Lead, Total	59	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Manganese, Total	300	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Mercury, Total	0.16	0.10	mg/kg		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Vanadium, Total	32	1	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Zinc, Total	265	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Aluminum, Total	6020	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Arsenic, Total	26	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Barium, Total	109	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Copper, Total	62	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Iron, Total	11300	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Lead, Total	25	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Manganese, Total	238	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Zinc, Total	154	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Aluminum, Total	26200	8	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Arsenic, Total	109	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Barium, Total	382	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Cadmium, Total	6.7	0.2	mg/kg - dry	J	SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Chromium, Total	33	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Cobalt, Total	10	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Copper, Total	910	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Iron, Total	30800	7	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Lead, Total	336	8	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Manganese, Total	1400	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Mercury, Total	1.7	0.11	mg/kg - dry	J	SW7471B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Nickel, Total	23	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Silver, Total	5	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Uranium, Total	5	5	mg/kg - dry		SW6020

SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Vanadium, Total	66	2	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14060106-053	6/2/2014	Zinc, Total	1380	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Aluminum, Total	7810	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Arsenic, Total	45	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Barium, Total	142	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Cadmium, Total	1.1	0.2	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Copper, Total	126	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Iron, Total	17800	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Lead, Total	79	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Manganese, Total	404	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Mercury, Total	0.22	0.10	mg/kg - dry		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Vanadium, Total	43	1	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14060106-054	6/2/2014	Zinc, Total	357	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Aluminum, Total	7860	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Arsenic, Total	34	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Barium, Total	143	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Copper, Total	81	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Iron, Total	14700	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Lead, Total	32	5	mg/kg - dry		SW6010B

SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Manganese, Total	310	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Vanadium, Total	23	1	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14060106-055	6/2/2014	Zinc, Total	201	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Aluminum, Total	17700	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Arsenic, Total	32	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Barium, Total	168	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Chromium, Total	80	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Cobalt, Total	8	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Copper, Total	256	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Iron, Total	19900	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Lead, Total	123	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Manganese, Total	947	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Mercury, Total	0.6	0.10	mg/kg		SW7471B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Nickel, Total	42	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Vanadium, Total	51	1	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Zinc, Total	619	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Aluminum, Total	4780	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Arsenic, Total	20	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Barium, Total	79	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Copper, Total	104	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Iron, Total	18100	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Lead, Total	50	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Manganese, Total	342	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Mercury, Total	0.19	0.10	mg/kg		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Vanadium, Total	52	1	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Zinc, Total	331	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Aluminum, Total	2640	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Barium, Total	48	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Cadmium, Total	0.2	0.2	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Copper, Total	37	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Iron, Total	5410	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Lead, Total	20	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Manganese, Total	141	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Zinc, Total	82	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Aluminum, Total	42900	9	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Arsenic, Total	77	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Barium, Total	408	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Cadmium, Total	7	0.2	mg/kg - dry	J	SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Chromium, Total	194	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Cobalt, Total	19	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Copper, Total	621	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Iron, Total	48100	8	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Lead, Total	298	8	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Manganese, Total	2290	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Mercury, Total	1.5	0.12	mg/kg - dry	J	SW7471B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Nickel, Total	101	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Vanadium, Total	123	2	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14060106-056	6/2/2014	Zinc, Total	1500	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Aluminum, Total	5930	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Arsenic, Total	25	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Barium, Total	98	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Cadmium, Total	1.1	0.2	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Chromium, Total	13	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Copper, Total	129	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Iron, Total	22500	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Lead, Total	62	5	mg/kg - dry	J	SW6010B

SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Manganese, Total	424	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Mercury, Total	0.24	0.10	mg/kg - dry		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Vanadium, Total	64	1	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14060106-057	6/2/2014	Zinc, Total	411	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Aluminum, Total	3070	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Arsenic, Total	11	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Barium, Total	56	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Cadmium, Total	0.3	0.2	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Chromium, Total	5	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Copper, Total	43	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Iron, Total	6280	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Lead, Total	23	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Manganese, Total	164	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Vanadium, Total	13	1	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14060106-058	6/2/2014	Zinc, Total	95	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Aluminum, Total	11200	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Barium, Total	80	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Cadmium, Total	1.3	0.2	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Chromium, Total	36	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Copper, Total	121	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Iron, Total	10700	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Lead, Total	50	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Manganese, Total	393	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Mercury, Total	0.22	0.10	mg/kg		SW7471B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Nickel, Total	21	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Vanadium, Total	24	1	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Zinc, Total	304	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Aluminum, Total	4740	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Barium, Total	95	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Copper, Total	64	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Iron, Total	9900	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Lead, Total	27	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Manganese, Total	270	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Mercury, Total	0.12	0.10	mg/kg		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Vanadium, Total	25	1	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Zinc, Total	213	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Aluminum, Total	3630	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Barium, Total	74	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Copper, Total	51	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Iron, Total	6190	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Lead, Total	20	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Manganese, Total	234	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Mercury, Total	0.13	0.10	mg/kg		SW7471B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Zinc, Total	127	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Aluminum, Total	53000	20	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Arsenic, Total	53	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Barium, Total	379	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Cadmium, Total	6.1	0.3	mg/kg - dry	J	SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Chromium, Total	169	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Cobalt, Total	18	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Copper, Total	572	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Iron, Total	50400	10	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Lead, Total	234	10	mg/kg - dry		SW6010B

SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Manganese, Total	1860	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Mercury, Total	1	0.10	mg/kg - dry	J	SW7471B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Nickel, Total	99	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Vanadium, Total	112	3	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14060106-059	6/2/2014	Zinc, Total	1430	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Aluminum, Total	6650	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Arsenic, Total	20	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Barium, Total	134	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Copper, Total	89	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Iron, Total	13900	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Lead, Total	38	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Manganese, Total	379	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Mercury, Total	0.17	0.10	mg/kg - dry		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Vanadium, Total	34	1	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14060106-060	6/2/2014	Zinc, Total	299	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Aluminum, Total	4500	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Arsenic, Total	15	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Barium, Total	92	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Copper, Total	63	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Iron, Total	7680	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Lead, Total	25	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Manganese, Total	290	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Mercury, Total	0.17	0.10	mg/kg - dry		SW7471B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Vanadium, Total	15	1	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14060106-061	6/2/2014	Zinc, Total	157	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Aluminum, Total	10600	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Arsenic, Total	18	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Barium, Total	86	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Cadmium, Total	1.6	0.2	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Chromium, Total	36	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Copper, Total	152	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Iron, Total	11500	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Lead, Total	53	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Manganese, Total	640	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Mercury, Total	0.36	0.10	mg/kg		SW7471B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Nickel, Total	19	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Uranium, Total	8	5	mg/kg		SW6020

SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Vanadium, Total	30	1	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Zinc, Total	307	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Aluminum, Total	4180	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Barium, Total	88	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Copper, Total	52	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Iron, Total	9850	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Lead, Total	31	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Manganese, Total	366	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Mercury, Total	0.14	0.10	mg/kg		SW7471B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Vanadium, Total	28	1	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Zinc, Total	209	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Aluminum, Total	3080	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Barium, Total	71	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Copper, Total	57	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Iron, Total	6430	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Lead, Total	18	5	mg/kg		SW6010B

SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Manganese, Total	225	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Zinc, Total	105	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Aluminum, Total	24300	7	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Arsenic, Total	42	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Barium, Total	198	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Cadmium, Total	3.6	0.2	mg/kg - dry	J	SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Chromium, Total	83	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Cobalt, Total	10	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Copper, Total	350	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Iron, Total	26400	6	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Lead, Total	122	7	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Manganese, Total	1470	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Mercury, Total	0.84	0.10	mg/kg - dry	J	SW7471B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Nickel, Total	43	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Uranium, Total	17	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Vanadium, Total	68	2	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14060106-062	6/2/2014	Zinc, Total	705	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Aluminum, Total	5270	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Arsenic, Total	15	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Barium, Total	111	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Copper, Total	66	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Iron, Total	12400	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Lead, Total	39	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Manganese, Total	461	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Mercury, Total	0.18	0.10	mg/kg - dry		SW7471B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Vanadium, Total	35	1	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14060106-063	6/2/2014	Zinc, Total	263	5	mg/kg - dry	J	SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Aluminum, Total	3710	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Arsenic, Total	13	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Barium, Total	86	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Copper, Total	68	5	mg/kg - dry	J	SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Iron, Total	7750	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Lead, Total	21	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Manganese, Total	271	5	mg/kg - dry	J	SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Vanadium, Total	19	1	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14060106-064	6/2/2014	Zinc, Total	126	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Aluminum, Total	9310	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Barium, Total	114	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Chromium, Total	23	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Copper, Total	159	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Iron, Total	13900	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Lead, Total	53	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Manganese, Total	307	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Molybdenum, Total	16	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Vanadium, Total	38	1	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Zinc, Total	201	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Aluminum, Total	2760	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Barium, Total	32	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Copper, Total	31	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Iron, Total	5490	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Lead, Total	19	5	mg/kg		SW6010B

SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Manganese, Total	114	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Zinc, Total	80	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Aluminum, Total	1940	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Barium, Total	42	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Copper, Total	24	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Iron, Total	3630	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Lead, Total	6	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Manganese, Total	185	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Vanadium, Total	8	1	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Zinc, Total	61	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Aluminum, Total	21000	8	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Arsenic, Total	34	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Barium, Total	258	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Cadmium, Total	1.8	0.3	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Chromium, Total	51	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Copper, Total	359	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Iron, Total	31400	7	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Lead, Total	120	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Manganese, Total	693	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Mercury, Total	0.17	0.10	mg/kg - dry		SW7471B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Molybdenum, Total	36	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Nickel, Total	23	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Vanadium, Total	86	2	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14090233-004	9/11/2014	Zinc, Total	453	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Aluminum, Total	3540	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Barium, Total	41	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Cadmium, Total	0.2	0.2	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Copper, Total	40	5	mg/kg - dry	J	SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Iron, Total	7040	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Lead, Total	24	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Manganese, Total	147	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Vanadium, Total	19	1	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14090233-005	9/11/2014	Zinc, Total	102	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Aluminum, Total	2490	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Barium, Total	54	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Copper, Total	31	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Iron, Total	4670	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Lead, Total	8	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Manganese, Total	238	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Vanadium, Total	11	1	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14090233-006	9/11/2014	Zinc, Total	79	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Aluminum, Total	7950	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Arsenic, Total	98	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Barium, Total	119	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Cadmium, Total	6.3	0.2	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Chromium, Total	23	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Copper, Total	1010	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Iron, Total	15300	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Lead, Total	241	5	mg/kg		SW6010B

SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Manganese, Total	543	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Mercury, Total	0.54	0.10	mg/kg		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Molybdenum, Total	9	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Vanadium, Total	39	1	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Zinc, Total	1360	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Aluminum, Total	4090	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Arsenic, Total	68	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Barium, Total	55	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Cadmium, Total	4.6	0.2	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Chromium, Total	17	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Cobalt, Total	7	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Copper, Total	641	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Iron, Total	44000	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Lead, Total	196	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Manganese, Total	810	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Mercury, Total	0.15	0.10	mg/kg		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Vanadium, Total	59	1	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Zinc, Total	1520	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Aluminum, Total	2980	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Arsenic, Total	48	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Barium, Total	43	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Cadmium, Total	1.4	0.2	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Copper, Total	296	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Iron, Total	10700	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Lead, Total	70	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Manganese, Total	364	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Zinc, Total	998	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Aluminum, Total	20400	9	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Arsenic, Total	253	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Barium, Total	306	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Cadmium, Total	16.1	0.4	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Chromium, Total	58	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Copper, Total	2600	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Iron, Total	39200	8	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Lead, Total	620	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Manganese, Total	1400	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Mercury, Total	1.4	0.13	mg/kg - dry		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Molybdenum, Total	23	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Nickel, Total	22	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Silver, Total	8	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Uranium, Total	13	5	mg/kg - dry		SW6020

SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Vanadium, Total	101	2	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14090233-007	9/11/2014	Zinc, Total	3500	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Aluminum, Total	5180	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Arsenic, Total	87	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Barium, Total	70	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Cadmium, Total	5.8	0.2	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Chromium, Total	22	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Copper, Total	814	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Iron, Total	55800	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Lead, Total	249	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Manganese, Total	1030	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Mercury, Total	0.2	0.10	mg/kg - dry		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Nickel, Total	10	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Vanadium, Total	75	1	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14090233-008	9/11/2014	Zinc, Total	1930	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Aluminum, Total	3650	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Arsenic, Total	59	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Barium, Total	53	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Cadmium, Total	1.7	0.2	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Copper, Total	362	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Iron, Total	13100	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Lead, Total	85	5	mg/kg - dry	J	SW6010B

SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Manganese, Total	446	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Vanadium, Total	17	1	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14090233-009	9/11/2014	Zinc, Total	1220	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Aluminum, Total	7940	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Arsenic, Total	42	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Barium, Total	134	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Cadmium, Total	4.9	0.2	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Chromium, Total	22	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Copper, Total	309	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Iron, Total	13300	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Lead, Total	171	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Manganese, Total	1770	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Mercury, Total	0.43	0.10	mg/kg		SW7471B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Molybdenum, Total	9	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Nickel, Total	12	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Vanadium, Total	43	1	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Zinc, Total	900	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Aluminum, Total	2830	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Barium, Total	58	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Copper, Total	62	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Iron, Total	7070	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Lead, Total	43	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Manganese, Total	996	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Vanadium, Total	22	1	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Zinc, Total	228	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Aluminum, Total	3210	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Barium, Total	68	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Copper, Total	45	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Iron, Total	6300	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Lead, Total	51	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Manganese, Total	832	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Zinc, Total	189	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Aluminum, Total	22400	10	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Arsenic, Total	118	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Barium, Total	379	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Cadmium, Total	13.7	0.5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Chromium, Total	63	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Copper, Total	873	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Iron, Total	37600	9	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Lead, Total	483	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Manganese, Total	4990	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Mercury, Total	1.2	0.10	mg/kg - dry		SW7471B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Molybdenum, Total	25	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Nickel, Total	35	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Uranium, Total	10	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Vanadium, Total	123	2	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14090234-019	9/11/2014	Zinc, Total	2540	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Aluminum, Total	3580	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Arsenic, Total	21	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Barium, Total	73	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Chromium, Total	6	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Copper, Total	78	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Iron, Total	8940	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Lead, Total	54	5	mg/kg - dry		SW6010B

SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Manganese, Total	1260	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14090234-020	9/11/2014	Zinc, Total	288	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Aluminum, Total	3980	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Arsenic, Total	17	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Barium, Total	85	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Copper, Total	56	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Iron, Total	7810	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Lead, Total	63	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Manganese, Total	1030	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14090234-021	9/11/2014	Zinc, Total	234	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Aluminum, Total	6800	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Arsenic, Total	33	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Barium, Total	122	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Cadmium, Total	3.5	0.2	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Chromium, Total	20	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Copper, Total	368	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Iron, Total	13000	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Lead, Total	179	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Manganese, Total	1320	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Mercury, Total	0.6	0.10	mg/kg		SW7471B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Molybdenum, Total	8	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Vanadium, Total	38	1	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Zinc, Total	957	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Aluminum, Total	3490	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Barium, Total	49	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Copper, Total	148	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Iron, Total	16600	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Lead, Total	48	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Manganese, Total	513	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Mercury, Total	0.12	0.10	mg/kg		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Vanadium, Total	36	1	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Zinc, Total	392	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Aluminum, Total	3170	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Barium, Total	53	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Copper, Total	83	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Iron, Total	7250	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Lead, Total	44	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Manganese, Total	369	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Zinc, Total	224	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Aluminum, Total	17800	9	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Arsenic, Total	87	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Barium, Total	320	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Cadmium, Total	9.2	0.4	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Chromium, Total	53	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Copper, Total	965	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Iron, Total	34100	8	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Lead, Total	468	5	mg/kg - dry		SW6010B

SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Manganese, Total	3460	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Mercury, Total	1.6	0.26	mg/kg - dry		SW7471B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Molybdenum, Total	20	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Nickel, Total	24	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Silver, Total	6	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Uranium, Total	8	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Vanadium, Total	100	2	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14090234-022	9/11/2014	Zinc, Total	2510	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Aluminum, Total	4460	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Arsenic, Total	21	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Barium, Total	63	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Cadmium, Total	1.4	0.2	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Chromium, Total	14	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Copper, Total	189	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Iron, Total	21200	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Lead, Total	61	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Manganese, Total	656	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Mercury, Total	0.15	0.10	mg/kg - dry		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Vanadium, Total	46	1	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14090234-023	9/11/2014	Zinc, Total	501	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Aluminum, Total	3850	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Arsenic, Total	15	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Barium, Total	65	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Copper, Total	101	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Iron, Total	8800	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Lead, Total	54	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Manganese, Total	447	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Vanadium, Total	17	1	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14090234-024	9/11/2014	Zinc, Total	272	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Aluminum, Total	5120	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Arsenic, Total	26	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Barium, Total	85	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Boron, Total	6	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Cadmium, Total	3.9	0.2	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Copper, Total	281	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Iron, Total	8310	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Lead, Total	153	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Manganese, Total	569	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Mercury, Total	0.8	0.10	mg/kg		SW7471B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Zinc, Total	608	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Aluminum, Total	2620	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Arsenic, Total	40	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Barium, Total	41	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Copper, Total	312	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Iron, Total	5240	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Lead, Total	29	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Manganese, Total	155	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Mercury, Total	0.19	0.10	mg/kg		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Zinc, Total	165	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Aluminum, Total	2530	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Barium, Total	35	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Copper, Total	87	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Iron, Total	4750	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Lead, Total	40	5	mg/kg		SW6010B

SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Manganese, Total	109	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Mercury, Total	0.14	0.10	mg/kg		SW7471B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Zinc, Total	107	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Aluminum, Total	18600	10	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Arsenic, Total	94	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Barium, Total	308	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Boron, Total	20	20	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Cadmium, Total	14.3	0.6	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Chromium, Total	49	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Copper, Total	1020	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Iron, Total	30100	10	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Lead, Total	554	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Manganese, Total	2060	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Mercury, Total	2.9	0.36	mg/kg - dry		SW7471B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Molybdenum, Total	15	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Nickel, Total	29	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Silver, Total	8	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Uranium, Total	10	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Vanadium, Total	71	3	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14090234-025	9/10/2014	Zinc, Total	2210	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Aluminum, Total	3450	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Arsenic, Total	52	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Barium, Total	54	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Copper, Total	411	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Iron, Total	6900	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Lead, Total	38	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Manganese, Total	203	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Mercury, Total	0.24	0.10	mg/kg - dry		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Vanadium, Total	15	1	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14090234-026	9/10/2014	Zinc, Total	217	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Aluminum, Total	2880	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Arsenic, Total	12	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Barium, Total	40	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Copper, Total	99	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Iron, Total	5410	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Lead, Total	46	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Manganese, Total	124	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Mercury, Total	0.15	0.10	mg/kg - dry		SW7471B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Vanadium, Total	11	1	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14090234-027	9/10/2014	Zinc, Total	121	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Aluminum, Total	6820	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Barium, Total	97	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Copper, Total	228	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Iron, Total	8610	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Lead, Total	98	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Manganese, Total	354	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Mercury, Total	0.53	0.10	mg/kg		SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Zinc, Total	532	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Aluminum, Total	7920	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Barium, Total	84	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Cadmium, Total	2.2	0.2	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Copper, Total	128	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Iron, Total	8530	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Lead, Total	69	5	mg/kg		SW6010B

SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Manganese, Total	452	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Mercury, Total	0.37	0.10	mg/kg		SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Zinc, Total	346	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Aluminum, Total	10700	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Arsenic, Total	7	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Barium, Total	138	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Cadmium, Total	1.4	0.2	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Copper, Total	58	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Iron, Total	9160	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Lead, Total	26	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Manganese, Total	380	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Mercury, Total	0.13	0.10	mg/kg		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Zinc, Total	229	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Aluminum, Total	19900	10	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Arsenic, Total	51	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Barium, Total	282	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Cadmium, Total	8.3	0.5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Chromium, Total	28	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Copper, Total	665	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Iron, Total	25100	9	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Lead, Total	285	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Manganese, Total	1030	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Mercury, Total	1.5	0.29	mg/kg - dry		SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Molybdenum, Total	13	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Nickel, Total	13	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Uranium, Total	8	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Vanadium, Total	53	2	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14090234-028	9/10/2014	Zinc, Total	1550	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Aluminum, Total	18500	8	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Arsenic, Total	23	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Barium, Total	195	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Cadmium, Total	5.2	0.4	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Copper, Total	299	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Iron, Total	19900	7	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Lead, Total	160	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Manganese, Total	1060	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Mercury, Total	0.85	0.10	mg/kg - dry		SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Vanadium, Total	39	2	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14090234-029	9/10/2014	Zinc, Total	808	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Aluminum, Total	26900	9	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Barium, Total	347	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Cadmium, Total	3.5	0.4	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Copper, Total	145	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Iron, Total	23000	8	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Lead, Total	65	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Manganese, Total	955	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Mercury, Total	0.34	0.10	mg/kg - dry		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Vanadium, Total	26	2	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14090234-030	9/10/2014	Zinc, Total	575	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Aluminum, Total	7530	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Barium, Total	101	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Cadmium, Total	2.6	0.2	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Copper, Total	200	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Iron, Total	8560	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Lead, Total	106	5	mg/kg		SW6010B

SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Manganese, Total	482	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Mercury, Total	0.49	0.10	mg/kg		SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Zinc, Total	487	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Aluminum, Total	10200	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Barium, Total	102	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Cadmium, Total	2.7	0.2	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Copper, Total	109	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Iron, Total	9590	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Lead, Total	74	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Manganese, Total	519	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Mercury, Total	0.32	0.10	mg/kg		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Zinc, Total	327	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Aluminum, Total	14700	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Barium, Total	216	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Cadmium, Total	1.4	0.2	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Copper, Total	66	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Iron, Total	12000	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Lead, Total	94	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Manganese, Total	957	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Zinc, Total	313	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Aluminum, Total	25600	10	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Arsenic, Total	48	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Barium, Total	344	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Cadmium, Total	9	0.5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Chromium, Total	26	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Copper, Total	677	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Iron, Total	29100	10	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Lead, Total	359	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Manganese, Total	1640	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Mercury, Total	1.7	0.10	mg/kg - dry		SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Molybdenum, Total	8	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Nickel, Total	13	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Uranium, Total	7	5	mg/kg - dry		SW6020

SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Vanadium, Total	57	2	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14090234-031	9/10/2014	Zinc, Total	1650	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Aluminum, Total	18400	6	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Arsenic, Total	15	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Barium, Total	186	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Boron, Total	ND	8	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Cadmium, Total	4.8	0.3	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Copper, Total	198	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Iron, Total	17400	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Lead, Total	135	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Manganese, Total	942	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Mercury, Total	0.58	0.10	mg/kg - dry		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Vanadium, Total	29	1	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14090234-032	9/10/2014	Zinc, Total	593	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Aluminum, Total	28600	7	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Barium, Total	421	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Boron, Total	ND	9	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Cadmium, Total	2.8	0.3	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Copper, Total	127	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Iron, Total	23400	6	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Lead, Total	182	5	mg/kg - dry	J	SW6010B

SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Manganese, Total	1860	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Mercury, Total	0.14	0.10	mg/kg - dry		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Vanadium, Total	29	1	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14090234-033	9/10/2014	Zinc, Total	609	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Aluminum, Total	6750	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Barium, Total	87	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Cadmium, Total	2.6	0.2	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Copper, Total	210	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Iron, Total	7780	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Lead, Total	94	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Manganese, Total	242	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Mercury, Total	0.48	0.10	mg/kg		SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Zinc, Total	490	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Aluminum, Total	8940	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Barium, Total	107	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Cadmium, Total	3.3	0.2	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Copper, Total	127	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Iron, Total	9910	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Lead, Total	85	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Manganese, Total	375	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Mercury, Total	0.39	0.10	mg/kg		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Zinc, Total	601	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Aluminum, Total	12100	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Barium, Total	155	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Cadmium, Total	1.6	0.2	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Copper, Total	101	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Iron, Total	9500	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Lead, Total	36	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Manganese, Total	381	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Mercury, Total	0.29	0.10	mg/kg		SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Zinc, Total	269	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Aluminum, Total	24000	10	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Arsenic, Total	53	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Barium, Total	309	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Cadmium, Total	9.4	0.6	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Chromium, Total	27	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Copper, Total	745	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Iron, Total	27700	10	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Lead, Total	333	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Manganese, Total	860	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Mercury, Total	1.7	0.10	mg/kg - dry		SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Molybdenum, Total	13	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Nickel, Total	15	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Uranium, Total	11	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Vanadium, Total	58	3	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14090234-034	9/10/2014	Zinc, Total	1740	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Aluminum, Total	17500	7	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Arsenic, Total	27	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Barium, Total	209	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Boron, Total	ND	9	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Cadmium, Total	6.5	0.3	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Copper, Total	249	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Iron, Total	19400	6	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Lead, Total	166	5	mg/kg - dry		SW6010B

SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Manganese, Total	734	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Mercury, Total	0.76	0.10	mg/kg - dry		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Vanadium, Total	35	1	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14090234-035	9/10/2014	Zinc, Total	1170	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Aluminum, Total	26700	7	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Arsenic, Total	31	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Barium, Total	343	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Cadmium, Total	3.4	0.4	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Copper, Total	224	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Iron, Total	21000	7	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Lead, Total	80	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Manganese, Total	844	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Mercury, Total	0.64	0.10	mg/kg - dry	J	SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Vanadium, Total	24	2	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14090234-036	9/10/2014	Zinc, Total	596	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Aluminum, Total	13300	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Barium, Total	124	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Cadmium, Total	2.7	0.2	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Chromium, Total	57	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Copper, Total	150	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Iron, Total	13300	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Lead, Total	87	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Manganese, Total	464	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Mercury, Total	0.31	0.10	mg/kg		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Nickel, Total	28	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Zinc, Total	456	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Aluminum, Total	3220	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Barium, Total	36	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Copper, Total	30	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Iron, Total	8110	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Lead, Total	10	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Manganese, Total	95	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Zinc, Total	94	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Aluminum, Total	2920	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Barium, Total	34	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Copper, Total	20	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Iron, Total	3680	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Lead, Total	6	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Manganese, Total	80	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Vanadium, Total	6	1	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Zinc, Total	62	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Aluminum, Total	33600	9	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Arsenic, Total	38	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Barium, Total	316	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Cadmium, Total	6.7	0.3	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Chromium, Total	143	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Copper, Total	381	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Iron, Total	33700	8	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Lead, Total	220	5	mg/kg - dry		SW6010B

SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Manganese, Total	1180	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Mercury, Total	0.79	0.10	mg/kg - dry		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Nickel, Total	72	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Vanadium, Total	54	2	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14090234-037	9/10/2014	Zinc, Total	1160	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Aluminum, Total	4320	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Barium, Total	49	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Cadmium, Total	0.9	0.2	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Copper, Total	40	5	mg/kg - dry	J	SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Iron, Total	10900	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Lead, Total	13	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Manganese, Total	128	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Mercury, Total	0.11	0.10	mg/kg - dry		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14090234-038	9/10/2014	Zinc, Total	127	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Aluminum, Total	3590	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Barium, Total	41	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Copper, Total	25	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Iron, Total	4530	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Lead, Total	7	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Manganese, Total	99	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Vanadium, Total	8	1	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14090234-039	9/10/2014	Zinc, Total	76	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Aluminum, Total	5780	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Barium, Total	100	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Cadmium, Total	3.1	0.2	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Chromium, Total	25	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Copper, Total	115	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Iron, Total	6770	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Lead, Total	62	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Manganese, Total	1220	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Mercury, Total	0.18	0.10	mg/kg		SW7471B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Nickel, Total	15	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Zinc, Total	532	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Aluminum, Total	4020	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Barium, Total	78	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Copper, Total	28	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Iron, Total	13200	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Lead, Total	13	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Manganese, Total	311	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Vanadium, Total	40	1	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Zinc, Total	127	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Aluminum, Total	4030	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Barium, Total	75	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Copper, Total	14	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Iron, Total	5220	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Lead, Total	6	5	mg/kg		SW6010B

SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Manganese, Total	330	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Zinc, Total	87	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Aluminum, Total	21100	10	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Arsenic, Total	36	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Barium, Total	367	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Cadmium, Total	11.3	0.6	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Chromium, Total	93	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Copper, Total	420	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Iron, Total	24800	10	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Lead, Total	228	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Manganese, Total	4470	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Mercury, Total	0.65	0.10	mg/kg - dry		SW7471B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Molybdenum, Total	5	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Nickel, Total	54	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Vanadium, Total	73	3	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14090234-040	9/10/2014	Zinc, Total	1950	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Aluminum, Total	4940	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Barium, Total	96	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Copper, Total	34	5	mg/kg - dry	J	SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Iron, Total	16200	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Lead, Total	16	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Manganese, Total	382	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Mercury, Total	0.1	0.10	mg/kg - dry		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Vanadium, Total	49	1	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14090234-041	9/10/2014	Zinc, Total	157	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Aluminum, Total	4730	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Barium, Total	88	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Copper, Total	17	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Iron, Total	6130	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Lead, Total	7	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Manganese, Total	388	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Vanadium, Total	13	1	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14090234-042	9/10/2014	Zinc, Total	102	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Aluminum, Total	7700	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Barium, Total	105	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Cadmium, Total	2.1	0.2	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Chromium, Total	16	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Copper, Total	99	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Iron, Total	7750	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Lead, Total	72	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Manganese, Total	425	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Mercury, Total	0.18	0.10	mg/kg		SW7471B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Zinc, Total	367	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Aluminum, Total	3920	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Barium, Total	89	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Copper, Total	20	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Iron, Total	7480	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Lead, Total	12	5	mg/kg		SW6010B

SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Manganese, Total	126	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Molybdenum, Total	9	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Zinc, Total	81	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Aluminum, Total	3930	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Barium, Total	89	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Copper, Total	19	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Iron, Total	5700	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Lead, Total	9	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Manganese, Total	144	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Zinc, Total	60	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Aluminum, Total	26600	10	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Arsenic, Total	44	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Barium, Total	362	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Cadmium, Total	7.2	0.5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Chromium, Total	57	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Copper, Total	343	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Iron, Total	26700	10	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Lead, Total	248	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Manganese, Total	1470	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Mercury, Total	0.62	0.10	mg/kg - dry		SW7471B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Nickel, Total	32	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Uranium, Total	9	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Vanadium, Total	64	3	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14090234-043	9/10/2014	Zinc, Total	1260	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Aluminum, Total	5130	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Barium, Total	117	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Copper, Total	27	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Iron, Total	9790	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Lead, Total	16	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Manganese, Total	164	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Molybdenum, Total	12	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Vanadium, Total	26	1	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14090234-044	9/10/2014	Zinc, Total	106	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Aluminum, Total	5000	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Barium, Total	113	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Copper, Total	24	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Iron, Total	7250	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Lead, Total	12	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Manganese, Total	183	5	mg/kg - dry	J	SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Vanadium, Total	14	1	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14090234-045	9/10/2014	Zinc, Total	76	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Aluminum, Total	8070	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Barium, Total	122	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Cadmium, Total	2.7	0.2	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Copper, Total	127	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Iron, Total	8330	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Lead, Total	40	5	mg/kg		SW6010B

SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Manganese, Total	795	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Mercury, Total	0.2	0.10	mg/kg		SW7471B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Vanadium, Total	22	1	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Zinc, Total	472	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Aluminum, Total	4240	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Barium, Total	114	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Copper, Total	30	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Iron, Total	8040	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Lead, Total	12	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Manganese, Total	263	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Vanadium, Total	22	1	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Zinc, Total	95	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Aluminum, Total	3440	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Arsenic, Total	5	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Barium, Total	89	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Copper, Total	21	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Iron, Total	5410	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Lead, Total	8	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Manganese, Total	298	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Zinc, Total	75	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Aluminum, Total	31300	10	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Arsenic, Total	37	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Barium, Total	473	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Cadmium, Total	10.6	0.6	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Chromium, Total	43	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Copper, Total	493	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Iron, Total	32300	10	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Lead, Total	156	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Manganese, Total	3090	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Mercury, Total	0.78	0.10	mg/kg - dry		SW7471B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Nickel, Total	26	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Uranium, Total	6	5	mg/kg - dry		SW6020

SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Vanadium, Total	87	3	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14090234-046	9/10/2014	Zinc, Total	1830	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Aluminum, Total	5820	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Arsenic, Total	5	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Barium, Total	157	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Chromium, Total	13	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Copper, Total	41	5	mg/kg - dry	J	SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Iron, Total	11000	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Lead, Total	16	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Manganese, Total	361	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Vanadium, Total	30	1	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14090234-047	9/10/2014	Zinc, Total	131	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Aluminum, Total	4390	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Arsenic, Total	7	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Barium, Total	114	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Cadmium, Total	0.4	0.2	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Copper, Total	27	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Iron, Total	6900	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Lead, Total	10	5	mg/kg - dry		SW6010B

SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Manganese, Total	381	5	mg/kg - dry	J	SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Vanadium, Total	13	1	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14090234-048	9/10/2014	Zinc, Total	95	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Aluminum, Total	11600	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Barium, Total	111	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Boron, Total	6	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Cadmium, Total	1.7	0.2	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Chromium, Total	11	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Copper, Total	98	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Iron, Total	11100	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Lead, Total	37	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Manganese, Total	674	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Mercury, Total	0.2	0.10	mg/kg		SW7471B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Vanadium, Total	24	1	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Zinc, Total	408	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Aluminum, Total	4730	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Arsenic, Total	5	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Barium, Total	128	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Copper, Total	26	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Iron, Total	15300	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Lead, Total	13	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Manganese, Total	356	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Vanadium, Total	43	1	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Zinc, Total	184	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Aluminum, Total	3510	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Barium, Total	99	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Copper, Total	56	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Iron, Total	5440	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Lead, Total	116	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Manganese, Total	1200	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Zinc, Total	373	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Aluminum, Total	49900	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Arsenic, Total	42	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Barium, Total	477	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Boron, Total	24	20	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Cadmium, Total	7.1	0.6	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Chromium, Total	48	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Copper, Total	420	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Iron, Total	47700	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Lead, Total	158	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Manganese, Total	2900	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Mercury, Total	0.85	0.10	mg/kg - dry		SW7471B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Nickel, Total	29	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Vanadium, Total	104	3	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14090234-049	9/9/2014	Zinc, Total	1760	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Aluminum, Total	5980	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Arsenic, Total	7	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Barium, Total	162	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Copper, Total	33	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Iron, Total	19300	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Lead, Total	16	5	mg/kg - dry		SW6010B

SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Manganese, Total	450	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Vanadium, Total	55	1	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14090234-050	9/9/2014	Zinc, Total	232	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Aluminum, Total	4480	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Barium, Total	127	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Copper, Total	72	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Iron, Total	6930	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Lead, Total	148	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Manganese, Total	1540	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14090234-051	9/9/2014	Zinc, Total	476	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Aluminum, Total	9630	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Arsenic, Total	72	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Barium, Total	188	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Cadmium, Total	6.1	0.2	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Chromium, Total	19	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Copper, Total	755	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Iron, Total	15200	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Lead, Total	267	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Manganese, Total	1190	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Mercury, Total	1.6	0.10	mg/kg		SW7471B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Vanadium, Total	34	1	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Zinc, Total	994	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Aluminum, Total	3320	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Arsenic, Total	64	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Barium, Total	73	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Cadmium, Total	2.8	0.2	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Chromium, Total	23	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Copper, Total	288	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Iron, Total	38400	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Lead, Total	205	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Manganese, Total	524	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Mercury, Total	0.59	0.10	mg/kg		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Vanadium, Total	106	1	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Zinc, Total	851	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Aluminum, Total	3480	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Arsenic, Total	195	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Barium, Total	99	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Cadmium, Total	6.2	0.2	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Copper, Total	941	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Iron, Total	18700	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Lead, Total	109	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Manganese, Total	772	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Mercury, Total	0.27	0.10	mg/kg		SW7471B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Molybdenum, Total	5	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Silver, Total	6	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Vanadium, Total	24	1	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Zinc, Total	2450	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Aluminum, Total	25500	9	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Arsenic, Total	192	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Barium, Total	496	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Cadmium, Total	16.1	0.4	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Chromium, Total	50	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Copper, Total	2000	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Iron, Total	40300	8	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Lead, Total	706	5	mg/kg - dry		SW6010B

SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Manganese, Total	3140	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Mercury, Total	4.2	0.13	mg/kg - dry		SW7471B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Molybdenum, Total	5	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Nickel, Total	27	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Silver, Total	9	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Vanadium, Total	89	2	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14090234-052	9/9/2014	Zinc, Total	2630	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Aluminum, Total	4190	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Arsenic, Total	80	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Barium, Total	92	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Cadmium, Total	3.5	0.2	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Chromium, Total	29	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Copper, Total	362	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Iron, Total	48400	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Lead, Total	258	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Manganese, Total	660	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Mercury, Total	0.75	0.10	mg/kg - dry		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Vanadium, Total	133	1	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14090234-053	9/9/2014	Zinc, Total	1070	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Aluminum, Total	4080	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Arsenic, Total	228	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Barium, Total	116	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Cadmium, Total	7.3	0.2	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Copper, Total	1100	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Iron, Total	21900	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Lead, Total	127	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Manganese, Total	904	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Mercury, Total	0.32	0.10	mg/kg - dry		SW7471B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Silver, Total	7	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14090234-054	9/9/2014	Zinc, Total	2870	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Aluminum, Total	11300	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Arsenic, Total	25	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Barium, Total	110	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Chromium, Total	26	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Copper, Total	57	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Iron, Total	11600	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Lead, Total	39	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Manganese, Total	269	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Mercury, Total	0.33	0.10	mg/kg		SW7471B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Nickel, Total	14	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Vanadium, Total	29	1	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Zinc, Total	67	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Aluminum, Total	6770	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Arsenic, Total	28	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Barium, Total	96	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Chromium, Total	16	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Copper, Total	20	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Iron, Total	17200	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Lead, Total	7	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Manganese, Total	131	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Vanadium, Total	54	1	mg/kg		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Zinc, Total	32	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Aluminum, Total	7960	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Barium, Total	107	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Copper, Total	14	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Iron, Total	9720	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Lead, Total	ND	5	mg/kg		SW6010B

SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Manganese, Total	155	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Zinc, Total	47	5	mg/kg		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Aluminum, Total	25500	7	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Arsenic, Total	56	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Barium, Total	247	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Boron, Total	ND	9	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Cadmium, Total	1.6	0.3	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Chromium, Total	59	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Copper, Total	129	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Iron, Total	26100	6	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Lead, Total	89	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Manganese, Total	606	5	mg/kg - dry	J	SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Mercury, Total	0.75	0.10	mg/kg - dry		SW7471B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Nickel, Total	32	5	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Vanadium, Total	64	1	mg/kg - dry		SW6010B
SS-15G	<0.065 mm	Natural Sample	H14090233-010	9/9/2014	Zinc, Total	150	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Aluminum, Total	8670	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Arsenic, Total	36	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Barium, Total	123	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Chromium, Total	21	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Copper, Total	26	5	mg/kg - dry	J	SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Iron, Total	22100	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Lead, Total	8	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Manganese, Total	168	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Vanadium, Total	69	1	mg/kg - dry		SW6010B
SS-15G	0.065-1 mm	Natural Sample	H14090233-011	9/9/2014	Zinc, Total	41	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Aluminum, Total	9910	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Barium, Total	134	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Chromium, Total	14	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Copper, Total	17	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Iron, Total	12100	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Lead, Total	5	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Manganese, Total	193	5	mg/kg - dry	J	SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Vanadium, Total	24	1	mg/kg - dry		SW6010B
SS-15G	1-2 mm	Natural Sample	H14090233-012	9/9/2014	Zinc, Total	58	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Aluminum, Total	10200	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Arsenic, Total	107	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Barium, Total	173	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Cadmium, Total	4.4	0.2	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Chromium, Total	58	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Copper, Total	399	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Iron, Total	23200	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Lead, Total	219	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Manganese, Total	798	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Mercury, Total	0.78	0.10	mg/kg		SW7471B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Nickel, Total	29	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Vanadium, Total	37	1	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Zinc, Total	1350	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Aluminum, Total	4340	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Arsenic, Total	56	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Barium, Total	76	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Cadmium, Total	1.3	0.2	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Chromium, Total	24	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Copper, Total	139	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Iron, Total	33600	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Lead, Total	50	5	mg/kg		SW6010B

SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Manganese, Total	289	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Mercury, Total	0.28	0.10	mg/kg		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Uranium, Total	7	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Vanadium, Total	103	1	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Zinc, Total	537	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Aluminum, Total	5370	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Arsenic, Total	43	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Barium, Total	83	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Cadmium, Total	1.3	0.2	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Copper, Total	116	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Iron, Total	12000	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Lead, Total	35	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Manganese, Total	401	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Mercury, Total	0.28	0.10	mg/kg		SW7471B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Vanadium, Total	22	1	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Zinc, Total	500	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Aluminum, Total	22700	7	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Arsenic, Total	238	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Barium, Total	386	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Boron, Total	ND	9	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Cadmium, Total	9.9	0.3	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Chromium, Total	129	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Copper, Total	889	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Iron, Total	51700	6	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Lead, Total	489	8	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Manganese, Total	1780	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Mercury, Total	1.7	0.11	mg/kg - dry		SW7471B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Molybdenum, Total	8	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Nickel, Total	65	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Vanadium, Total	82	2	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14090234-055	9/9/2014	Zinc, Total	3000	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Aluminum, Total	5350	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Arsenic, Total	69	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Barium, Total	94	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Cadmium, Total	1.6	0.2	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Chromium, Total	30	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Copper, Total	172	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Iron, Total	41500	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Lead, Total	61	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Manganese, Total	356	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Mercury, Total	0.35	0.10	mg/kg - dry		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Nickel, Total	8	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Uranium, Total	8	5	mg/kg - dry		SW6020

SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Vanadium, Total	127	1	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14090234-056	9/9/2014	Zinc, Total	662	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Aluminum, Total	6340	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Arsenic, Total	51	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Barium, Total	98	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Cadmium, Total	1.5	0.2	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Chromium, Total	17	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Copper, Total	137	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Iron, Total	14200	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Lead, Total	41	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Manganese, Total	473	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Mercury, Total	0.34	0.10	mg/kg - dry		SW7471B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Nickel, Total	9	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Vanadium, Total	26	1	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14090234-057	9/9/2014	Zinc, Total	590	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Aluminum, Total	10200	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Arsenic, Total	35	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Barium, Total	110	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Cadmium, Total	3.7	0.2	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Chromium, Total	16	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Copper, Total	312	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Iron, Total	13500	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Lead, Total	162	5	mg/kg		SW6010B

SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Manganese, Total	1370	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Mercury, Total	0.86	0.10	mg/kg		SW7471B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Vanadium, Total	35	1	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Zinc, Total	740	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Aluminum, Total	4590	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Arsenic, Total	27	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Barium, Total	85	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Copper, Total	103	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Iron, Total	17000	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Lead, Total	64	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Manganese, Total	552	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Mercury, Total	0.26	0.10	mg/kg		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Vanadium, Total	46	1	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Zinc, Total	293	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Aluminum, Total	3180	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Arsenic, Total	19	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Barium, Total	82	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Copper, Total	93	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Iron, Total	7600	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Lead, Total	29	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Manganese, Total	420	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Mercury, Total	0.16	0.10	mg/kg		SW7471B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Zinc, Total	208	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Aluminum, Total	27000	9	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Arsenic, Total	93	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Barium, Total	292	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Cadmium, Total	9.9	0.4	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Chromium, Total	41	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Copper, Total	825	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Iron, Total	35600	8	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Lead, Total	428	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Manganese, Total	3630	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Mercury, Total	2.3	0.13	mg/kg - dry		SW7471B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Nickel, Total	21	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Vanadium, Total	92	2	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14090234-058	9/9/2014	Zinc, Total	1960	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Aluminum, Total	5850	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Arsenic, Total	34	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Barium, Total	108	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Chromium, Total	15	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Copper, Total	131	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Iron, Total	21700	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Lead, Total	81	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Manganese, Total	702	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Mercury, Total	0.33	0.10	mg/kg - dry		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Vanadium, Total	59	1	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14090234-059	9/9/2014	Zinc, Total	372	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Aluminum, Total	3970	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Arsenic, Total	23	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Barium, Total	103	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Copper, Total	116	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Iron, Total	9490	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Lead, Total	37	5	mg/kg - dry	J	SW6010B

SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Manganese, Total	525	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Mercury, Total	0.2	0.10	mg/kg - dry		SW7471B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Vanadium, Total	18	1	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14090234-060	9/9/2014	Zinc, Total	260	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Aluminum, Total	9100	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Arsenic, Total	31	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Barium, Total	149	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Cadmium, Total	6.3	0.2	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Chromium, Total	25	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Copper, Total	421	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Iron, Total	15700	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Lead, Total	109	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Manganese, Total	1900	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Mercury, Total	0.55	0.10	mg/kg		SW7471B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Nickel, Total	13	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Vanadium, Total	45	1	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Zinc, Total	803	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Aluminum, Total	2510	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Barium, Total	56	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Chromium, Total	15	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Copper, Total	61	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Iron, Total	21800	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Lead, Total	24	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Manganese, Total	562	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Vanadium, Total	71	1	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Zinc, Total	238	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Aluminum, Total	3010	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Arsenic, Total	21	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Barium, Total	74	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Copper, Total	68	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Iron, Total	6650	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Lead, Total	16	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Manganese, Total	528	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Zinc, Total	144	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Aluminum, Total	24500	8	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Arsenic, Total	83	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Barium, Total	402	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Cadmium, Total	17	0.4	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Chromium, Total	66	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Copper, Total	1130	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Iron, Total	42300	7	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Lead, Total	295	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Manganese, Total	5120	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Mercury, Total	0.3	0.10	mg/kg - dry		SW7471B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Nickel, Total	35	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Vanadium, Total	122	2	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14090234-061	9/9/2014	Zinc, Total	2160	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Aluminum, Total	3150	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Arsenic, Total	19	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Barium, Total	70	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Chromium, Total	18	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Copper, Total	76	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Iron, Total	27400	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Lead, Total	30	5	mg/kg - dry		SW6010B

SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Manganese, Total	705	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Mercury, Total	0.11	0.10	mg/kg - dry		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Vanadium, Total	89	1	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14090234-062	9/9/2014	Zinc, Total	299	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Aluminum, Total	3660	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Arsenic, Total	26	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Barium, Total	90	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Copper, Total	83	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Iron, Total	8100	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Lead, Total	20	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Manganese, Total	643	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Vanadium, Total	19	1	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14090234-063	9/9/2014	Zinc, Total	175	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Aluminum, Total	10500	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Arsenic, Total	37	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Barium, Total	131	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Cadmium, Total	5.7	0.2	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Chromium, Total	22	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Copper, Total	317	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Iron, Total	16700	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Lead, Total	131	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Manganese, Total	1110	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Mercury, Total	0.6	0.10	mg/kg		SW7471B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Nickel, Total	11	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Vanadium, Total	43	1	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Zinc, Total	954	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Aluminum, Total	3830	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Arsenic, Total	32	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Barium, Total	90	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Copper, Total	65	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Iron, Total	9110	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Lead, Total	95	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Manganese, Total	301	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Mercury, Total	0.12	0.10	mg/kg		SW7471B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Vanadium, Total	24	1	mg/kg		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Zinc, Total	282	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Aluminum, Total	4020	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Barium, Total	95	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Copper, Total	49	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Iron, Total	6970	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Lead, Total	18	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Manganese, Total	364	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Zinc, Total	127	5	mg/kg		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Aluminum, Total	22700	8	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Arsenic, Total	80	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Barium, Total	283	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Cadmium, Total	12.2	0.4	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Chromium, Total	47	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Copper, Total	682	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Iron, Total	35900	7	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Lead, Total	282	5	mg/kg - dry		SW6010B

SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Manganese, Total	2390	5	mg/kg - dry	J	SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Mercury, Total	0.26	0.10	mg/kg - dry		SW7471B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Nickel, Total	24	5	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Vanadium, Total	92	2	mg/kg - dry		SW6010B
SS-19	<0.065 mm	Natural Sample	H14090234-064	9/9/2014	Zinc, Total	2050	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Aluminum, Total	4810	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Arsenic, Total	41	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Barium, Total	113	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Boron, Total	ND	6	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Copper, Total	82	5	mg/kg - dry	J	SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Iron, Total	11400	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Lead, Total	119	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Manganese, Total	378	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Mercury, Total	0.15	0.10	mg/kg - dry		SW7471B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Vanadium, Total	30	1	mg/kg - dry		SW6010B
SS-19	0.065-1 mm	Natural Sample	H14090234-065	9/9/2014	Zinc, Total	354	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Aluminum, Total	4780	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Arsenic, Total	17	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Barium, Total	113	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Cadmium, Total	0.3	0.2	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Chromium, Total	10	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Copper, Total	59	5	mg/kg - dry	J	SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Iron, Total	8300	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Lead, Total	22	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Manganese, Total	433	5	mg/kg - dry	J	SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-19	1-2 mm	Natural Sample	H14090234-066	9/9/2014	Zinc, Total	151	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Aluminum, Total	11100	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Arsenic, Total	19	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Barium, Total	146	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Chromium, Total	29	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Cobalt, Total	6	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Copper, Total	164	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Iron, Total	16600	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Lead, Total	66	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Manganese, Total	760	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Mercury, Total	0.1	0.10	mg/kg		SW7471B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Molybdenum, Total	12	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Nickel, Total	13	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Vanadium, Total	50	1	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Zinc, Total	228	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Aluminum, Total	2640	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Barium, Total	35	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Copper, Total	24	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Iron, Total	4720	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Lead, Total	10	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Manganese, Total	126	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Zinc, Total	60	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Aluminum, Total	3230	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Arsenic, Total	7	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Barium, Total	53	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Cadmium, Total	ND	0.2	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Copper, Total	27	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Iron, Total	5480	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Lead, Total	6	5	mg/kg		SW6010B

SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Manganese, Total	168	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Molybdenum, Total	16	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Zinc, Total	46	5	mg/kg		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Aluminum, Total	24900	8	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Arsenic, Total	42	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Barium, Total	330	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Cadmium, Total	2.2	0.3	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Chromium, Total	66	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Cobalt, Total	13	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Copper, Total	369	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Iron, Total	37500	7	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Lead, Total	150	5	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Manganese, Total	1720	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Mercury, Total	0.23	0.10	mg/kg - dry		SW7471B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Molybdenum, Total	26	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Nickel, Total	29	5	mg/kg - dry	J	SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Vanadium, Total	114	2	mg/kg - dry		SW6010B
SS-01	<0.065 mm	Natural Sample	H14120110-006	12/4/2014	Zinc, Total	514	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Aluminum, Total	3390	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Barium, Total	45	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Copper, Total	31	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Iron, Total	6060	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Lead, Total	13	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Manganese, Total	161	5	mg/kg - dry	J	SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Vanadium, Total	15	1	mg/kg - dry		SW6010B
SS-01	0.065-1 mm	Natural Sample	H14120110-007	12/4/2014	Zinc, Total	77	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Aluminum, Total	3730	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Barium, Total	61	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Cadmium, Total	ND	0.2	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Copper, Total	32	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Iron, Total	6330	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Lead, Total	7	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Manganese, Total	194	5	mg/kg - dry	J	SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Molybdenum, Total	18	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Vanadium, Total	16	1	mg/kg - dry		SW6010B
SS-01	1-2 mm	Natural Sample	H14120110-008	12/4/2014	Zinc, Total	53	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Aluminum, Total	9550	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Arsenic, Total	85	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Barium, Total	159	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Cadmium, Total	3.8	0.2	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Chromium, Total	24	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Copper, Total	933	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Iron, Total	17100	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Lead, Total	220	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Manganese, Total	835	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Mercury, Total	0.48	0.10	mg/kg		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Molybdenum, Total	10	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Vanadium, Total	43	1	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Zinc, Total	985	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Aluminum, Total	4520	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Arsenic, Total	89	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Barium, Total	77	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Boron, Total	6	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Chromium, Total	23	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Cobalt, Total	10	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Copper, Total	719	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Iron, Total	47500	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Lead, Total	136	5	mg/kg		SW6010B

SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Manganese, Total	1640	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Mercury, Total	0.14	0.10	mg/kg		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Vanadium, Total	77	1	mg/kg		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Zinc, Total	951	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Aluminum, Total	3400	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Arsenic, Total	122	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Barium, Total	37	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Copper, Total	518	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Iron, Total	12300	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Lead, Total	105	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Manganese, Total	2230	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Vanadium, Total	26	1	mg/kg		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Zinc, Total	670	5	mg/kg		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Aluminum, Total	24800	9	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Arsenic, Total	221	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Barium, Total	414	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Cadmium, Total	9.9	0.4	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Chromium, Total	63	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Cobalt, Total	11	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Copper, Total	2420	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Iron, Total	44500	8	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Lead, Total	572	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Manganese, Total	2170	5	mg/kg - dry	J	SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Mercury, Total	1.2	0.13	mg/kg - dry		SW7471B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Molybdenum, Total	26	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Nickel, Total	25	5	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Silver, Total	10	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Uranium, Total	8	5	mg/kg - dry		SW6020
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Vanadium, Total	113	2	mg/kg - dry		SW6010B
SS-05A	<0.065 mm	Natural Sample	H14120110-009	12/4/2014	Zinc, Total	2560	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Aluminum, Total	5650	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Arsenic, Total	111	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Barium, Total	96	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Boron, Total	7	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Cadmium, Total	3.1	0.2	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Chromium, Total	29	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Cobalt, Total	13	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Copper, Total	899	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Iron, Total	59400	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Lead, Total	170	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Manganese, Total	2050	5	mg/kg - dry	J	SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Mercury, Total	0.17	0.10	mg/kg - dry		SW7471B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Nickel, Total	12	5	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Vanadium, Total	97	1	mg/kg - dry		SW6010B
SS-05A	0.065-1 mm	Natural Sample	H14120110-010	12/4/2014	Zinc, Total	1190	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Aluminum, Total	4130	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Arsenic, Total	148	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Barium, Total	45	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Cadmium, Total	1.4	0.2	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Copper, Total	630	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Iron, Total	15000	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Lead, Total	128	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Manganese, Total	2710	5	mg/kg - dry	J	SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Vanadium, Total	31	1	mg/kg - dry		SW6010B
SS-05A	1-2 mm	Natural Sample	H14120110-011	12/4/2014	Zinc, Total	816	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Aluminum, Total	7840	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Arsenic, Total	46	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Barium, Total	235	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Cadmium, Total	4.6	0.2	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Chromium, Total	124	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Cobalt, Total	9	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Copper, Total	373	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Iron, Total	14900	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Lead, Total	196	5	mg/kg		SW6010B

SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Manganese, Total	4590	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Mercury, Total	0.36	0.10	mg/kg		SW7471B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Molybdenum, Total	9	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Nickel, Total	72	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Vanadium, Total	58	1	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Zinc, Total	954	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Aluminum, Total	3250	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Arsenic, Total	21	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Barium, Total	78	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Cadmium, Total	0.6	0.2	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Copper, Total	91	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Iron, Total	6850	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Lead, Total	40	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Manganese, Total	1050	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Mercury, Total	0.11	0.10	mg/kg		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Zinc, Total	254	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Aluminum, Total	2540	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Arsenic, Total	12	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Barium, Total	57	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Copper, Total	43	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Iron, Total	5650	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Lead, Total	55	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Manganese, Total	861	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Zinc, Total	198	5	mg/kg		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Aluminum, Total	23100	10	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Arsenic, Total	137	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Barium, Total	691	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Cadmium, Total	13.7	0.5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Chromium, Total	366	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Cobalt, Total	27	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Copper, Total	1100	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Iron, Total	43900	9	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Lead, Total	578	5	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Manganese, Total	13500	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Mercury, Total	1.1	0.10	mg/kg - dry		SW7471B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Molybdenum, Total	26	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Nickel, Total	213	5	mg/kg - dry	J	SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Silver, Total	6	5	mg/kg - dry		SW6020
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Uranium, Total	8	5	mg/kg - dry		SW6020

SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Vanadium, Total	171	2	mg/kg - dry		SW6010B
SS-06G	<0.065 mm	Natural Sample	H14120109-017	12/4/2014	Zinc, Total	2810	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Aluminum, Total	3860	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Arsenic, Total	25	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Barium, Total	93	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Copper, Total	108	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Iron, Total	8130	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Lead, Total	48	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Manganese, Total	1250	5	mg/kg - dry	J	SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Mercury, Total	0.13	0.10	mg/kg - dry		SW7471B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Vanadium, Total	22	1	mg/kg - dry		SW6010B
SS-06G	0.065-1 mm	Natural Sample	H14120109-018	12/4/2014	Zinc, Total	302	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Aluminum, Total	2840	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Arsenic, Total	14	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Barium, Total	64	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Copper, Total	48	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Iron, Total	6320	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Lead, Total	62	5	mg/kg - dry	J	SW6010B

SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Manganese, Total	963	5	mg/kg - dry	J	SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Vanadium, Total	18	1	mg/kg - dry		SW6010B
SS-06G	1-2 mm	Natural Sample	H14120109-019	12/4/2014	Zinc, Total	221	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Aluminum, Total	6580	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Arsenic, Total	40	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Barium, Total	130	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Cadmium, Total	2.8	0.2	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Chromium, Total	48	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Copper, Total	334	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Iron, Total	13000	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Lead, Total	133	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Manganese, Total	1090	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Mercury, Total	0.24	0.10	mg/kg		SW7471B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Molybdenum, Total	9	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Nickel, Total	24	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Vanadium, Total	34	1	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Zinc, Total	1000	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Aluminum, Total	4480	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Arsenic, Total	26	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Barium, Total	65	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Cadmium, Total	1.4	0.2	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Copper, Total	187	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Iron, Total	16200	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Lead, Total	62	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Manganese, Total	618	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Mercury, Total	0.24	0.10	mg/kg		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Vanadium, Total	32	1	mg/kg		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Zinc, Total	657	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Aluminum, Total	3000	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Arsenic, Total	16	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Barium, Total	48	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Copper, Total	86	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Iron, Total	6780	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Lead, Total	30	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Manganese, Total	393	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Zinc, Total	282	5	mg/kg		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Aluminum, Total	33600	20	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Arsenic, Total	204	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Barium, Total	665	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Cadmium, Total	14.2	0.8	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Chromium, Total	245	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Cobalt, Total	22	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Copper, Total	1710	6	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Iron, Total	66300	10	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Lead, Total	680	5	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Manganese, Total	5550	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Mercury, Total	1.2	0.10	mg/kg - dry		SW7471B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Molybdenum, Total	45	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Nickel, Total	123	5	mg/kg - dry	J	SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Silver, Total	11	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Uranium, Total	15	5	mg/kg - dry		SW6020
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Vanadium, Total	173	4	mg/kg - dry		SW6010B
SS-07	<0.065 mm	Natural Sample	H14120109-020	12/4/2014	Zinc, Total	5100	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Aluminum, Total	5830	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Arsenic, Total	34	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Barium, Total	85	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Cadmium, Total	1.9	0.2	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Chromium, Total	13	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Copper, Total	244	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Iron, Total	21100	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Lead, Total	80	5	mg/kg - dry	J	SW6010B

SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Manganese, Total	804	5	mg/kg - dry	J	SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Mercury, Total	0.32	0.10	mg/kg - dry		SW7471B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Vanadium, Total	42	1	mg/kg - dry		SW6010B
SS-07	0.065-1 mm	Natural Sample	H14120109-021	12/4/2014	Zinc, Total	855	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Aluminum, Total	3590	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Arsenic, Total	19	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Barium, Total	58	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Copper, Total	103	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Iron, Total	8120	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Lead, Total	35	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Manganese, Total	470	5	mg/kg - dry	J	SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Vanadium, Total	18	1	mg/kg - dry		SW6010B
SS-07	1-2 mm	Natural Sample	H14120109-022	12/4/2014	Zinc, Total	338	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Aluminum, Total	5360	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Barium, Total	90	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Cadmium, Total	2.3	0.2	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Chromium, Total	28	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Copper, Total	199	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Iron, Total	8110	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Lead, Total	91	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Manganese, Total	490	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Mercury, Total	0.44	0.10	mg/kg		SW7471B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Nickel, Total	15	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Zinc, Total	475	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Aluminum, Total	4900	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Barium, Total	84	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Cadmium, Total	2.8	0.2	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Copper, Total	257	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Iron, Total	8650	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Lead, Total	60	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Manganese, Total	424	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Mercury, Total	0.47	0.10	mg/kg		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Zinc, Total	461	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Aluminum, Total	2900	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Arsenic, Total	8	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Barium, Total	64	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Copper, Total	69	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Iron, Total	5420	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Lead, Total	71	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Manganese, Total	1160	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Zinc, Total	212	5	mg/kg		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Aluminum, Total	29000	20	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Arsenic, Total	83	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Barium, Total	489	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Cadmium, Total	12.2	0.9	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Chromium, Total	153	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Cobalt, Total	15	5	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Copper, Total	1080	6	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Iron, Total	43800	20	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Lead, Total	490	5	mg/kg - dry		SW6010B

SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Manganese, Total	2650	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Mercury, Total	2.4	0.10	mg/kg - dry		SW7471B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Molybdenum, Total	26	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Nickel, Total	82	5	mg/kg - dry	J	SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Silver, Total	7	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Uranium, Total	12	5	mg/kg - dry		SW6020
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Vanadium, Total	99	4	mg/kg - dry		SW6010B
SS-08	<0.065 mm	Natural Sample	H14120109-023	12/4/2014	Zinc, Total	2560	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Aluminum, Total	11600	8	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Arsenic, Total	31	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Barium, Total	198	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Boron, Total	11	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Cadmium, Total	6.6	0.4	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Chromium, Total	23	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Copper, Total	608	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Iron, Total	20500	7	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Lead, Total	142	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Manganese, Total	1000	5	mg/kg - dry	J	SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Mercury, Total	1.1	0.12	mg/kg - dry		SW7471B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Nickel, Total	12	5	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Vanadium, Total	46	2	mg/kg - dry		SW6010B
SS-08	0.065-1 mm	Natural Sample	H14120109-024	12/4/2014	Zinc, Total	1090	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Aluminum, Total	3760	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Arsenic, Total	11	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Barium, Total	83	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Chromium, Total	5	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Copper, Total	90	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Iron, Total	7040	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Lead, Total	92	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Manganese, Total	1510	5	mg/kg - dry	J	SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Mercury, Total	0.11	0.10	mg/kg - dry		SW7471B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Vanadium, Total	22	1	mg/kg - dry		SW6010B
SS-08	1-2 mm	Natural Sample	H14120109-025	12/4/2014	Zinc, Total	275	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Aluminum, Total	9040	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Barium, Total	123	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Chromium, Total	15	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Copper, Total	227	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Iron, Total	9540	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Lead, Total	91	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Manganese, Total	442	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Mercury, Total	0.31	0.10	mg/kg		SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Zinc, Total	514	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Aluminum, Total	8900	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Arsenic, Total	10	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Barium, Total	98	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Cadmium, Total	2.3	0.2	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Copper, Total	167	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Iron, Total	9080	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Lead, Total	73	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Manganese, Total	522	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Mercury, Total	0.59	0.10	mg/kg		SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Vanadium, Total	17	1	mg/kg		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Zinc, Total	408	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Aluminum, Total	19100	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Barium, Total	164	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Cadmium, Total	1.8	0.2	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Copper, Total	76	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Iron, Total	12600	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Lead, Total	81	5	mg/kg		SW6010B

SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Manganese, Total	650	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Mercury, Total	0.35	0.10	mg/kg		SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Zinc, Total	345	5	mg/kg		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Aluminum, Total	46700	20	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Arsenic, Total	77	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Barium, Total	635	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Boron, Total	ND	30	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Cadmium, Total	13.1	0.9	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Chromium, Total	78	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Cobalt, Total	16	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Copper, Total	1170	6	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Iron, Total	49300	20	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Lead, Total	468	5	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Manganese, Total	2280	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Mercury, Total	1.6	0.10	mg/kg - dry		SW7471B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Molybdenum, Total	17	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Nickel, Total	48	5	mg/kg - dry	J	SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Silver, Total	5	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Uranium, Total	11	5	mg/kg - dry		SW6020
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Vanadium, Total	98	4	mg/kg - dry		SW6010B
SS-10A-1	<0.065 mm	Natural Sample	H14120109-026	12/4/2014	Zinc, Total	2660	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Aluminum, Total	20700	8	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Arsenic, Total	22	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Barium, Total	226	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Boron, Total	9	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Cadmium, Total	5.4	0.4	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Copper, Total	388	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Iron, Total	21100	7	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Lead, Total	170	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Manganese, Total	1210	5	mg/kg - dry	J	SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Mercury, Total	1.4	0.23	mg/kg - dry	J	SW7471B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Vanadium, Total	40	2	mg/kg - dry		SW6010B
SS-10A-1	0.065-1 mm	Natural Sample	H14120109-027	12/4/2014	Zinc, Total	947	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Aluminum, Total	35500	6	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Arsenic, Total	16	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Barium, Total	306	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Boron, Total	9	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Cadmium, Total	3.3	0.3	mg/kg - dry	J	SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Copper, Total	141	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Iron, Total	23500	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Lead, Total	151	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Manganese, Total	1210	5	mg/kg - dry	J	SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Mercury, Total	0.65	0.10	mg/kg - dry	J	SW7471B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Vanadium, Total	33	1	mg/kg - dry		SW6010B
SS-10A-1	1-2 mm	Natural Sample	H14120109-028	12/4/2014	Zinc, Total	642	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Aluminum, Total	6310	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Arsenic, Total	15	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Barium, Total	77	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Chromium, Total	26	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Copper, Total	217	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Iron, Total	7350	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Lead, Total	70	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Manganese, Total	259	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Mercury, Total	0.36	0.10	mg/kg		SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Nickel, Total	15	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Zinc, Total	480	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Aluminum, Total	6820	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Arsenic, Total	11	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Barium, Total	96	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Copper, Total	167	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Iron, Total	7870	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Lead, Total	52	5	mg/kg		SW6010B

SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Manganese, Total	255	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Mercury, Total	0.33	0.10	mg/kg		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Zinc, Total	385	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Aluminum, Total	12500	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Barium, Total	111	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Cadmium, Total	2	0.2	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Copper, Total	100	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Iron, Total	9400	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Lead, Total	49	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Manganese, Total	444	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Mercury, Total	0.21	0.10	mg/kg		SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Zinc, Total	332	5	mg/kg		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Aluminum, Total	33900	20	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Arsenic, Total	78	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Barium, Total	415	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Cadmium, Total	13.5	0.8	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Chromium, Total	140	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Cobalt, Total	16	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Copper, Total	1170	6	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Iron, Total	39500	20	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Lead, Total	376	5	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Manganese, Total	1390	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Mercury, Total	1.9	0.10	mg/kg - dry		SW7471B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Molybdenum, Total	19	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Nickel, Total	80	5	mg/kg - dry	J	SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Uranium, Total	13	5	mg/kg - dry		SW6020
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Vanadium, Total	82	4	mg/kg - dry		SW6010B
SS-10A-2	<0.065 mm	Duplicate Sample	H14120109-029	12/4/2014	Zinc, Total	2580	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Aluminum, Total	21000	10	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Arsenic, Total	33	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Barium, Total	297	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Boron, Total	11	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Cadmium, Total	7.9	0.5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Chromium, Total	24	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Cobalt, Total	9	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Copper, Total	516	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Iron, Total	24300	8	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Lead, Total	159	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Manganese, Total	786	5	mg/kg - dry	J	SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Mercury, Total	1	0.10	mg/kg - dry		SW7471B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Nickel, Total	14	5	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Uranium, Total	7	5	mg/kg - dry		SW6020

SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Vanadium, Total	47	2	mg/kg - dry		SW6010B
SS-10A-2	0.065-1 mm	Duplicate Sample	H14120109-030	12/4/2014	Zinc, Total	1190	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Aluminum, Total	33500	9	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Arsenic, Total	23	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Barium, Total	295	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Boron, Total	10	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Cadmium, Total	5.3	0.4	mg/kg - dry	J	SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Chromium, Total	17	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Copper, Total	268	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Iron, Total	25100	8	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Lead, Total	131	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Manganese, Total	1180	5	mg/kg - dry	J	SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Mercury, Total	0.57	0.10	mg/kg - dry	J	SW7471B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Nickel, Total	11	5	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Vanadium, Total	38	2	mg/kg - dry		SW6010B
SS-10A-2	1-2 mm	Duplicate Sample	H14120109-031	12/4/2014	Zinc, Total	885	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Aluminum, Total	7400	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Arsenic, Total	17	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Barium, Total	87	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Copper, Total	214	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Iron, Total	8650	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Lead, Total	102	5	mg/kg		SW6010B

SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Manganese, Total	287	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Mercury, Total	0.37	0.10	mg/kg		SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Zinc, Total	518	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Aluminum, Total	10600	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Arsenic, Total	19	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Barium, Total	112	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Copper, Total	152	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Iron, Total	10700	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Lead, Total	63	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Manganese, Total	350	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Mercury, Total	0.41	0.10	mg/kg		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Vanadium, Total	19	1	mg/kg		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Zinc, Total	343	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Aluminum, Total	18400	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Barium, Total	142	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Cadmium, Total	1.1	0.2	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Copper, Total	56	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Iron, Total	11800	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Lead, Total	39	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Manganese, Total	365	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Zinc, Total	199	5	mg/kg		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Aluminum, Total	35200	20	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Arsenic, Total	81	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Barium, Total	415	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Cadmium, Total	11.8	0.7	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Chromium, Total	31	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Copper, Total	1020	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Iron, Total	41100	10	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Lead, Total	483	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Manganese, Total	1360	5	mg/kg - dry	J	SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Mercury, Total	1.7	0.10	mg/kg - dry		SW7471B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Molybdenum, Total	15	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Nickel, Total	17	5	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Uranium, Total	13	5	mg/kg - dry		SW6020

SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Vanadium, Total	69	3	mg/kg - dry		SW6010B
SS-10A-3	<0.065 mm	Duplicate Sample	H14120109-032	12/4/2014	Zinc, Total	2460	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Aluminum, Total	19000	6	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Arsenic, Total	33	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Barium, Total	200	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Boron, Total	7	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Cadmium, Total	4.5	0.3	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Copper, Total	273	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Iron, Total	19100	6	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Lead, Total	113	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Manganese, Total	627	5	mg/kg - dry	J	SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Mercury, Total	0.74	0.10	mg/kg - dry		SW7471B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Vanadium, Total	35	1	mg/kg - dry		SW6010B
SS-10A-3	0.065-1 mm	Duplicate Sample	H14120109-033	12/4/2014	Zinc, Total	615	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Aluminum, Total	38400	7	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Arsenic, Total	13	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Barium, Total	296	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Boron, Total	8	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Cadmium, Total	2.3	0.3	mg/kg - dry	J	SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Cobalt, Total	7	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Copper, Total	118	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Iron, Total	24500	6	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Lead, Total	82	5	mg/kg - dry	J	SW6010B

SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Manganese, Total	762	5	mg/kg - dry	J	SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Mercury, Total	0.21	0.10	mg/kg - dry		SW7471B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Vanadium, Total	28	2	mg/kg - dry		SW6010B
SS-10A-3	1-2 mm	Duplicate Sample	H14120109-034	12/4/2014	Zinc, Total	414	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Aluminum, Total	9530	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Arsenic, Total	14	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Barium, Total	133	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Cadmium, Total	2.5	0.2	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Copper, Total	230	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Iron, Total	9960	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Lead, Total	69	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Manganese, Total	767	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Mercury, Total	0.53	0.10	mg/kg		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Zinc, Total	486	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Aluminum, Total	9630	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Arsenic, Total	9	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Barium, Total	125	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Cadmium, Total	2.8	0.2	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Copper, Total	160	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Iron, Total	13900	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Lead, Total	42	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Manganese, Total	546	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Mercury, Total	0.36	0.10	mg/kg		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Vanadium, Total	33	1	mg/kg		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Zinc, Total	382	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Aluminum, Total	5000	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Arsenic, Total	6	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Barium, Total	64	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Cadmium, Total	1.9	0.2	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Copper, Total	59	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Iron, Total	5330	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Lead, Total	58	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Manganese, Total	670	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Vanadium, Total	12	1	mg/kg		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Zinc, Total	241	5	mg/kg		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Aluminum, Total	33700	10	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Arsenic, Total	48	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Barium, Total	472	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Cadmium, Total	8.9	0.5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Chromium, Total	32	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Cobalt, Total	12	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Copper, Total	813	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Iron, Total	35200	10	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Lead, Total	244	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Manganese, Total	2710	5	mg/kg - dry	J	SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Mercury, Total	1.9	0.18	mg/kg - dry		SW7471B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Molybdenum, Total	10	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Nickel, Total	18	5	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Vanadium, Total	72	3	mg/kg - dry		SW6010B
SS-10B	<0.065 mm	Natural Sample	H14120109-035	12/4/2014	Zinc, Total	1720	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Aluminum, Total	15800	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Arsenic, Total	14	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Barium, Total	204	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Boron, Total	5	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Cadmium, Total	4.6	0.2	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Chromium, Total	14	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Cobalt, Total	6	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Copper, Total	262	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Iron, Total	22800	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Lead, Total	68	5	mg/kg - dry	J	SW6010B

SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Manganese, Total	894	5	mg/kg - dry	J	SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Mercury, Total	0.59	0.10	mg/kg - dry		SW7471B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Vanadium, Total	55	1	mg/kg - dry		SW6010B
SS-10B	0.065-1 mm	Natural Sample	H14120109-036	12/4/2014	Zinc, Total	626	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Aluminum, Total	8470	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Arsenic, Total	10	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Barium, Total	108	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Cadmium, Total	3.2	0.3	mg/kg - dry	J	SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Chromium, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Copper, Total	100	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Iron, Total	9030	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Lead, Total	99	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Manganese, Total	1130	5	mg/kg - dry	J	SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Mercury, Total	0.15	0.10	mg/kg - dry		SW7471B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-10B	1-2 mm	Natural Sample	H14120109-037	12/4/2014	Zinc, Total	409	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Aluminum, Total	11800	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Barium, Total	178	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Cadmium, Total	4.4	0.2	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Copper, Total	224	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Iron, Total	11600	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Lead, Total	62	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Manganese, Total	1700	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Mercury, Total	0.37	0.10	mg/kg		SW7471B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Nickel, Total	7	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Vanadium, Total	31	1	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Zinc, Total	599	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Aluminum, Total	3770	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Barium, Total	71	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Copper, Total	32	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Iron, Total	12000	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Lead, Total	13	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Manganese, Total	507	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Vanadium, Total	37	1	mg/kg		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Zinc, Total	118	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Aluminum, Total	4100	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Barium, Total	87	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Cadmium, Total	0.4	0.2	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Chromium, Total	5	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Copper, Total	500	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Iron, Total	5020	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Lead, Total	23	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Manganese, Total	763	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Vanadium, Total	16	1	mg/kg		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Zinc, Total	109	5	mg/kg		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Aluminum, Total	34600	9	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Arsenic, Total	39	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Barium, Total	524	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Cadmium, Total	12.9	0.4	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Chromium, Total	29	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Copper, Total	659	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Iron, Total	34000	8	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Lead, Total	181	5	mg/kg - dry		SW6010B

SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Manganese, Total	4980	5	mg/kg - dry	J	SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Mercury, Total	1.1	0.10	mg/kg - dry		SW7471B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Nickel, Total	21	5	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Vanadium, Total	92	2	mg/kg - dry		SW6010B
SS-11C	<0.065 mm	Natural Sample	H14120109-038	12/4/2014	Zinc, Total	1760	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Aluminum, Total	5280	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Barium, Total	99	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Cadmium, Total	1.1	0.2	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Copper, Total	44	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Iron, Total	16800	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Lead, Total	18	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Manganese, Total	710	5	mg/kg - dry	J	SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Vanadium, Total	52	1	mg/kg - dry		SW6010B
SS-11C	0.065-1 mm	Natural Sample	H14120109-039	12/4/2014	Zinc, Total	165	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Aluminum, Total	5130	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Barium, Total	109	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Cadmium, Total	0.5	0.2	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Chromium, Total	7	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Copper, Total	626	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Iron, Total	6290	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Lead, Total	29	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Manganese, Total	956	5	mg/kg - dry	J	SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Vanadium, Total	20	1	mg/kg - dry		SW6010B
SS-11C	1-2 mm	Natural Sample	H14120109-040	12/4/2014	Zinc, Total	136	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Aluminum, Total	7530	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Barium, Total	117	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Cadmium, Total	2.6	0.2	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Copper, Total	178	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Iron, Total	8040	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Lead, Total	52	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Manganese, Total	907	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Mercury, Total	0.33	0.10	mg/kg		SW7471B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Vanadium, Total	22	1	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Zinc, Total	459	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Aluminum, Total	4640	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Barium, Total	104	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Cadmium, Total	0.9	0.2	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Copper, Total	34	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Iron, Total	7280	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Lead, Total	11	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Manganese, Total	258	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Zinc, Total	114	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Aluminum, Total	4400	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Barium, Total	123	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Copper, Total	27	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Iron, Total	5160	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Lead, Total	10	5	mg/kg		SW6010B

SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Manganese, Total	303	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Vanadium, Total	11	1	mg/kg		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Zinc, Total	106	5	mg/kg		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Aluminum, Total	27800	10	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Arsenic, Total	49	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Barium, Total	433	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Cadmium, Total	9.4	0.6	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Chromium, Total	36	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Cobalt, Total	12	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Copper, Total	658	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Iron, Total	29700	10	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Lead, Total	192	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Manganese, Total	3350	5	mg/kg - dry	J	SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Mercury, Total	1.2	0.10	mg/kg - dry		SW7471B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Molybdenum, Total	7	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Nickel, Total	20	5	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Vanadium, Total	80	3	mg/kg - dry		SW6010B
SS-11D	<0.065 mm	Natural Sample	H14120109-041	12/4/2014	Zinc, Total	1690	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Aluminum, Total	7080	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Barium, Total	158	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Cadmium, Total	1.3	0.2	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Copper, Total	52	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Iron, Total	11100	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Lead, Total	17	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Manganese, Total	393	5	mg/kg - dry	J	SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-11D	0.065-1 mm	Natural Sample	H14120109-042	12/4/2014	Zinc, Total	174	5	mg/kg - dry	J	SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Aluminum, Total	6650	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Arsenic, Total	6	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Barium, Total	186	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Copper, Total	41	5	mg/kg - dry	J	SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Iron, Total	7800	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Lead, Total	15	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Manganese, Total	458	5	mg/kg - dry	J	SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Vanadium, Total	17	1	mg/kg - dry		SW6010B
SS-11D	1-2 mm	Natural Sample	H14120109-043	12/4/2014	Zinc, Total	160	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Aluminum, Total	6530	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Barium, Total	106	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Copper, Total	181	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Iron, Total	7640	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Lead, Total	47	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Manganese, Total	693	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Mercury, Total	0.24	0.10	mg/kg		SW7471B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Zinc, Total	601	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Aluminum, Total	6070	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Arsenic, Total	5	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Barium, Total	128	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Cadmium, Total	1.5	0.2	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Copper, Total	68	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Iron, Total	8080	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Lead, Total	18	5	mg/kg		SW6010B

SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Manganese, Total	349	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Mercury, Total	0.16	0.10	mg/kg		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Vanadium, Total	18	1	mg/kg		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Zinc, Total	232	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Aluminum, Total	3680	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Arsenic, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Barium, Total	99	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Cadmium, Total	0.3	0.2	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Copper, Total	13	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Iron, Total	4920	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Lead, Total	5	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Manganese, Total	184	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Vanadium, Total	10	1	mg/kg		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Zinc, Total	63	5	mg/kg		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Aluminum, Total	25300	10	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Arsenic, Total	50	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Barium, Total	413	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Cadmium, Total	11.1	0.6	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Chromium, Total	32	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Copper, Total	703	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Iron, Total	29600	10	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Lead, Total	182	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Manganese, Total	2690	5	mg/kg - dry	J	SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Mercury, Total	0.95	0.10	mg/kg - dry		SW7471B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Molybdenum, Total	7	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Nickel, Total	20	5	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Uranium, Total	6	5	mg/kg - dry		SW6020
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Vanadium, Total	71	3	mg/kg - dry		SW6010B
SS-13	<0.065 mm	Natural Sample	H14120109-044	12/3/2014	Zinc, Total	2330	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Aluminum, Total	9480	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Barium, Total	200	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Cadmium, Total	2.4	0.2	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Cobalt, Total	5	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Copper, Total	106	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Iron, Total	12600	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Lead, Total	29	5	mg/kg - dry	J	SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Manganese, Total	546	5	mg/kg - dry	J	SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Mercury, Total	0.25	0.10	mg/kg - dry		SW7471B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Vanadium, Total	28	1	mg/kg - dry		SW6010B
SS-13	0.065-1 mm	Natural Sample	H14120109-045	12/3/2014	Zinc, Total	363	5	mg/kg - dry	J	SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Aluminum, Total	4640	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Arsenic, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Barium, Total	125	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Cadmium, Total	0.3	0.2	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Chromium, Total	11	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Copper, Total	16	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Iron, Total	6200	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Lead, Total	7	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Manganese, Total	232	5	mg/kg - dry	J	SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Vanadium, Total	13	1	mg/kg - dry		SW6010B
SS-13	1-2 mm	Natural Sample	H14120109-046	12/3/2014	Zinc, Total	79	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Aluminum, Total	8020	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Barium, Total	161	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Cadmium, Total	3.6	0.2	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Chromium, Total	12	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Copper, Total	189	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Iron, Total	9470	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Lead, Total	52	5	mg/kg		SW6010B

SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Manganese, Total	1880	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Mercury, Total	0.31	0.10	mg/kg		SW7471B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Vanadium, Total	27	1	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Zinc, Total	597	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Aluminum, Total	4230	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Arsenic, Total	13	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Barium, Total	106	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Chromium, Total	9	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Copper, Total	31	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Iron, Total	8630	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Lead, Total	154	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Manganese, Total	568	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Mercury, Total	0.64	0.10	mg/kg		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Uranium, Total	5	5	mg/kg		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Vanadium, Total	23	1	mg/kg		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Zinc, Total	162	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Aluminum, Total	3680	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Arsenic, Total	7	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Barium, Total	145	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Cadmium, Total	0.5	0.2	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Chromium, Total	7	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Copper, Total	45	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Iron, Total	4650	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Lead, Total	16	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Manganese, Total	940	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Vanadium, Total	14	1	mg/kg		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Zinc, Total	131	5	mg/kg		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Aluminum, Total	28100	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Arsenic, Total	45	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Barium, Total	564	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Boron, Total	ND	20	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Cadmium, Total	12.8	0.5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Chromium, Total	41	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Cobalt, Total	15	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Copper, Total	661	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Iron, Total	33200	10	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Lead, Total	184	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Manganese, Total	6580	5	mg/kg - dry	J	SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Mercury, Total	1.1	0.10	mg/kg - dry		SW7471B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Molybdenum, Total	7	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Nickel, Total	22	5	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Uranium, Total	6	5	mg/kg - dry		SW6020

SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Vanadium, Total	94	2	mg/kg - dry		SW6010B
SS-14	<0.065 mm	Natural Sample	H14120109-047	12/3/2014	Zinc, Total	2090	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Aluminum, Total	5700	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Arsenic, Total	18	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Barium, Total	142	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Cadmium, Total	0.7	0.2	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Chromium, Total	12	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Copper, Total	42	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Iron, Total	11600	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Lead, Total	208	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Manganese, Total	765	5	mg/kg - dry	J	SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Mercury, Total	0.87	0.10	mg/kg - dry		SW7471B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Nickel, Total	5	5	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Uranium, Total	7	5	mg/kg - dry		SW6020
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Vanadium, Total	30	1	mg/kg - dry		SW6010B
SS-14	0.065-1 mm	Natural Sample	H14120109-048	12/3/2014	Zinc, Total	219	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Aluminum, Total	4360	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Arsenic, Total	8	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Barium, Total	172	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Cadmium, Total	0.6	0.2	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Copper, Total	53	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Iron, Total	5510	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Lead, Total	18	5	mg/kg - dry		SW6010B

SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Manganese, Total	1110	5	mg/kg - dry	J	SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Mercury, Total	ND	0.10	mg/kg - dry		SW7471B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Vanadium, Total	17	1	mg/kg - dry		SW6010B
SS-14	1-2 mm	Natural Sample	H14120109-049	12/3/2014	Zinc, Total	156	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Aluminum, Total	11000	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Arsenic, Total	33	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Barium, Total	205	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Cadmium, Total	2.9	0.2	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Chromium, Total	14	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Copper, Total	419	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Iron, Total	12600	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Lead, Total	98	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Manganese, Total	1370	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Mercury, Total	0.64	0.10	mg/kg		SW7471B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Nickel, Total	8	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Vanadium, Total	29	1	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Zinc, Total	695	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Aluminum, Total	3100	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Arsenic, Total	91	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Barium, Total	72	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Cadmium, Total	10	0.2	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Chromium, Total	17	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Cobalt, Total	6	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Copper, Total	399	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Iron, Total	31100	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Lead, Total	194	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Manganese, Total	773	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Mercury, Total	0.44	0.10	mg/kg		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Nickel, Total	5	5	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Vanadium, Total	78	1	mg/kg		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Zinc, Total	3080	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Aluminum, Total	3140	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Arsenic, Total	43	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Barium, Total	54	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Cadmium, Total	0.8	0.2	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Chromium, Total	8	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Copper, Total	204	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Iron, Total	10400	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Lead, Total	60	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Manganese, Total	432	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Mercury, Total	0.11	0.10	mg/kg		SW7471B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Vanadium, Total	15	1	mg/kg		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Zinc, Total	300	5	mg/kg		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Aluminum, Total	33800	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Arsenic, Total	100	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Barium, Total	629	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Cadmium, Total	8.8	0.5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Chromium, Total	44	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Copper, Total	1290	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Iron, Total	38500	10	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Lead, Total	301	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Manganese, Total	4210	5	mg/kg - dry	J	SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Mercury, Total	2	0.15	mg/kg - dry		SW7471B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Nickel, Total	24	5	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Vanadium, Total	90	2	mg/kg - dry		SW6010B
SS-15A	<0.065 mm	Natural Sample	H14120109-050	12/3/2014	Zinc, Total	2130	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Aluminum, Total	4120	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Arsenic, Total	121	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Barium, Total	96	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Cadmium, Total	13.3	0.2	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Chromium, Total	22	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Cobalt, Total	9	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Copper, Total	530	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Iron, Total	41400	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Lead, Total	258	5	mg/kg - dry	J	SW6010B

SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Manganese, Total	1030	5	mg/kg - dry	J	SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Mercury, Total	0.59	0.10	mg/kg - dry		SW7471B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Vanadium, Total	104	1	mg/kg - dry		SW6010B
SS-15A	0.065-1 mm	Natural Sample	H14120109-051	12/3/2014	Zinc, Total	4100	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Aluminum, Total	3660	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Arsenic, Total	50	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Barium, Total	63	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Cadmium, Total	1	0.2	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Chromium, Total	9	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Copper, Total	238	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Iron, Total	12100	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Lead, Total	70	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Manganese, Total	503	5	mg/kg - dry	J	SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Mercury, Total	0.13	0.10	mg/kg - dry		SW7471B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Vanadium, Total	18	1	mg/kg - dry		SW6010B
SS-15A	1-2 mm	Natural Sample	H14120109-052	12/3/2014	Zinc, Total	349	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Aluminum, Total	13000	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Arsenic, Total	59	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Barium, Total	254	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B

SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Cadmium, Total	6.1	0.2	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Chromium, Total	20	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Cobalt, Total	6	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Copper, Total	528	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Iron, Total	15600	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Lead, Total	194	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Manganese, Total	1900	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Mercury, Total	0.94	0.10	mg/kg		SW7471B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Nickel, Total	11	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Vanadium, Total	37	1	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Zinc, Total	983	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Aluminum, Total	4270	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Arsenic, Total	47	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Barium, Total	78	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Cadmium, Total	1.3	0.2	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Chromium, Total	10	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Copper, Total	197	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Iron, Total	12900	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Lead, Total	72	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Manganese, Total	448	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Mercury, Total	0.27	0.10	mg/kg		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Nickel, Total	6	5	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Vanadium, Total	28	1	mg/kg		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Zinc, Total	519	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Aluminum, Total	6790	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Arsenic, Total	62	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Barium, Total	99	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Chromium, Total	17	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Copper, Total	186	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Iron, Total	11100	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Lead, Total	41	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Manganese, Total	649	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Mercury, Total	0.11	0.10	mg/kg		SW7471B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Vanadium, Total	23	1	mg/kg		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Zinc, Total	334	5	mg/kg		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Aluminum, Total	37500	9	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Arsenic, Total	168	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Barium, Total	730	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Cadmium, Total	17.4	0.4	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Chromium, Total	57	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Cobalt, Total	18	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Copper, Total	1520	5	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Iron, Total	44800	8	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Lead, Total	557	5	mg/kg - dry		SW6010B

SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Manganese, Total	5470	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Mercury, Total	2.7	0.14	mg/kg - dry		SW7471B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Molybdenum, Total	6	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Nickel, Total	32	5	mg/kg - dry	J	SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Silver, Total	8	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Vanadium, Total	107	2	mg/kg - dry		SW6010B
SS-15B	<0.065 mm	Natural Sample	H14120109-053	12/3/2014	Zinc, Total	2830	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Aluminum, Total	5480	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Arsenic, Total	61	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Barium, Total	100	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Cadmium, Total	1.7	0.2	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Chromium, Total	13	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Copper, Total	253	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Iron, Total	16600	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Lead, Total	92	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Manganese, Total	575	5	mg/kg - dry	J	SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Mercury, Total	0.34	0.10	mg/kg - dry		SW7471B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Nickel, Total	7	5	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Uranium, Total	5	5	mg/kg - dry		SW6020
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Vanadium, Total	36	1	mg/kg - dry		SW6010B
SS-15B	0.065-1 mm	Natural Sample	H14120109-054	12/3/2014	Zinc, Total	666	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Aluminum, Total	8410	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Arsenic, Total	77	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Barium, Total	122	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Chromium, Total	21	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Copper, Total	231	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Iron, Total	13800	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Lead, Total	51	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Manganese, Total	803	5	mg/kg - dry	J	SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Mercury, Total	0.13	0.10	mg/kg - dry		SW7471B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Nickel, Total	11	5	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Vanadium, Total	29	1	mg/kg - dry		SW6010B
SS-15B	1-2 mm	Natural Sample	H14120109-055	12/3/2014	Zinc, Total	414	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Aluminum, Total	11400	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Arsenic, Total	33	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Barium, Total	181	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Cadmium, Total	3	0.2	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Chromium, Total	20	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Cobalt, Total	5	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Copper, Total	322	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Iron, Total	15600	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Lead, Total	114	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Manganese, Total	1680	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Mercury, Total	0.77	0.10	mg/kg		SW7471B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Nickel, Total	10	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020

SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Vanadium, Total	43	1	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Zinc, Total	760	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Aluminum, Total	3720	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Arsenic, Total	38	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Barium, Total	76	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Cadmium, Total	2.8	0.2	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Chromium, Total	19	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Cobalt, Total	7	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Copper, Total	139	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Iron, Total	29500	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Lead, Total	47	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Manganese, Total	665	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Mercury, Total	0.2	0.10	mg/kg		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Vanadium, Total	95	1	mg/kg		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Zinc, Total	720	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Aluminum, Total	3390	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Arsenic, Total	28	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Barium, Total	60	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Cadmium, Total	0.7	0.2	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Chromium, Total	6	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Copper, Total	122	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Iron, Total	8480	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Lead, Total	30	5	mg/kg		SW6010B

SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Manganese, Total	557	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Mercury, Total	ND	0.10	mg/kg		SW7471B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Vanadium, Total	20	1	mg/kg		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Zinc, Total	230	5	mg/kg		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Aluminum, Total	29900	8	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Arsenic, Total	88	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Barium, Total	477	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Cadmium, Total	7.9	0.4	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Chromium, Total	52	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Cobalt, Total	14	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Copper, Total	846	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Iron, Total	41000	8	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Lead, Total	300	5	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Manganese, Total	4430	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Mercury, Total	2	0.13	mg/kg - dry		SW7471B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Nickel, Total	27	5	mg/kg - dry	J	SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Vanadium, Total	113	2	mg/kg - dry		SW6010B
SS-16B	<0.065 mm	Natural Sample	H14120109-056	12/3/2014	Zinc, Total	2000	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Aluminum, Total	4670	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Arsenic, Total	48	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Barium, Total	95	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Cadmium, Total	3.5	0.2	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Chromium, Total	23	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Cobalt, Total	8	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Copper, Total	174	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Iron, Total	37100	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Lead, Total	60	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Manganese, Total	835	5	mg/kg - dry	J	SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Mercury, Total	0.26	0.10	mg/kg - dry		SW7471B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Nickel, Total	6	5	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Vanadium, Total	119	1	mg/kg - dry		SW6010B
SS-16B	0.065-1 mm	Natural Sample	H14120109-057	12/3/2014	Zinc, Total	903	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Aluminum, Total	4060	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Arsenic, Total	33	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Barium, Total	71	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Cadmium, Total	0.8	0.2	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Chromium, Total	8	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Copper, Total	146	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Iron, Total	10200	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Lead, Total	36	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Manganese, Total	666	5	mg/kg - dry	J	SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Mercury, Total	0.11	0.10	mg/kg - dry		SW7471B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020

SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Vanadium, Total	24	1	mg/kg - dry		SW6010B
SS-16B	1-2 mm	Natural Sample	H14120109-058	12/3/2014	Zinc, Total	276	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Aluminum, Total	11400	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Arsenic, Total	85	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Barium, Total	175	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Cadmium, Total	5.1	0.2	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Chromium, Total	17	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Copper, Total	895	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Iron, Total	15800	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Lead, Total	307	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Manganese, Total	880	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Mercury, Total	2	0.10	mg/kg		SW7471B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Nickel, Total	9	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Vanadium, Total	35	1	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Zinc, Total	1200	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Aluminum, Total	3420	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Arsenic, Total	31	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Barium, Total	71	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Cadmium, Total	1.4	0.2	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Chromium, Total	13	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Copper, Total	177	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Iron, Total	18700	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Lead, Total	71	5	mg/kg		SW6010B

SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Manganese, Total	469	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Mercury, Total	0.35	0.10	mg/kg		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Uranium, Total	7	5	mg/kg		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Vanadium, Total	57	1	mg/kg		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Zinc, Total	377	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Aluminum, Total	2860	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Antimony, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Arsenic, Total	21	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Barium, Total	63	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Beryllium, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Boron, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Cadmium, Total	1	0.2	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Chromium, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Cobalt, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Copper, Total	102	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Iron, Total	8250	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Lead, Total	36	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Manganese, Total	511	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Mercury, Total	0.16	0.10	mg/kg		SW7471B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Molybdenum, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Nickel, Total	ND	5	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Selenium, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Silver, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Uranium, Total	ND	5	mg/kg		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Vanadium, Total	21	1	mg/kg		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Zinc, Total	264	5	mg/kg		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Aluminum, Total	30400	9	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Arsenic, Total	227	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Barium, Total	467	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B

SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Boron, Total	ND	10	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Cadmium, Total	13.6	0.4	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Chromium, Total	44	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Cobalt, Total	13	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Copper, Total	2390	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Iron, Total	42100	8	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Lead, Total	822	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Manganese, Total	2350	5	mg/kg - dry	J	SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Mercury, Total	5.3	0.27	mg/kg - dry		SW7471B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Nickel, Total	23	5	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Silver, Total	13	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Uranium, Total	12	5	mg/kg - dry		SW6020
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Vanadium, Total	93	2	mg/kg - dry		SW6010B
SS-17D	<0.065 mm	Natural Sample	H14120109-059	12/3/2014	Zinc, Total	3220	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Aluminum, Total	4600	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Arsenic, Total	42	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Barium, Total	95	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Cadmium, Total	1.9	0.2	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Chromium, Total	17	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Copper, Total	237	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Iron, Total	25100	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Lead, Total	95	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Manganese, Total	630	5	mg/kg - dry	J	SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Mercury, Total	0.47	0.10	mg/kg - dry		SW7471B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Uranium, Total	10	5	mg/kg - dry		SW6020

SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Vanadium, Total	76	1	mg/kg - dry		SW6010B
SS-17D	0.065-1 mm	Natural Sample	H14120109-060	12/3/2014	Zinc, Total	506	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Aluminum, Total	3390	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Antimony, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Arsenic, Total	25	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Barium, Total	75	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Beryllium, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Boron, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Cadmium, Total	1.2	0.2	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Chromium, Total	6	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Cobalt, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Copper, Total	121	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Iron, Total	9800	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Lead, Total	43	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Manganese, Total	607	5	mg/kg - dry	J	SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Mercury, Total	0.18	0.10	mg/kg - dry		SW7471B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Molybdenum, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Nickel, Total	ND	5	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Selenium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Silver, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Uranium, Total	ND	5	mg/kg - dry		SW6020
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Vanadium, Total	25	1	mg/kg - dry		SW6010B
SS-17D	1-2 mm	Natural Sample	H14120109-061	12/3/2014	Zinc, Total	314	5	mg/kg - dry	J	SW6010B

APPENDIX E

GROUNDWATER DATA

APPENDIX E
GROUNDWATER DATA

Table E1. Groundwater monitoring data from Streamside Tailings Operable Unit, 2014.

Site	Type	Lab ID	Collected Date	Parameter	Results	RL	Units	Qualifier	Method
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Aluminum, Dissolved	1.27	0.009	mg/L	J	E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Barium, Dissolved	0.008	0.003	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Cadmium, Dissolved	0.00773	0.00003	mg/L	J	E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Calcium, Dissolved	95	1	mg/L		E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Chloride	54	1	mg/L		E300.0
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Cobalt, Dissolved	0.04	0.01	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Copper, Dissolved	0.127	0.001	mg/L	J	E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Hardness as CaCO3	468	1	mg/L		A2340 B
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Iron, Dissolved	46.9	0.02	mg/L		E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Lead, Dissolved	0.0117	0.0003	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Magnesium, Dissolved	56	1	mg/L		E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Manganese, Dissolved	22.9	0.001	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Nickel, Dissolved	0.023	0.002	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Potassium, Dissolved	8	1	mg/L		E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Sodium, Dissolved	53	1	mg/L		E200.7
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Sulfate	750	1	mg/L		E300.0
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Uranium, Dissolved	0.0006	0.0002	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
1GW-1004A	Natural Sample	H14090136-003	9/4/2014	Zinc, Dissolved	9.97	0.008	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Aluminum, Dissolved	0.027	0.009	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Aluminum, Dissolved	0.029	0.009	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Barium, Dissolved	0.031	0.003	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Barium, Dissolved	0.031	0.003	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Barium, Dissolved	0.028	0.003	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Calcium, Dissolved	81	1	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Calcium, Dissolved	80	1	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Calcium, Dissolved	73	1	mg/L		E200.7

1GW-1056	Natural Sample	H14060159-013	6/4/2014	Chloride	17	1	mg/L		E300.0
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Chloride	17	1	mg/L		E300.0
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Chloride	17	1	mg/L		E300.0
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Hardness as CaCO3	272	1	mg/L		A2340 B
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Hardness as CaCO3	267	1	mg/L		A2340 B
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Hardness as CaCO3	244	1	mg/L		A2340 B
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Iron, Dissolved	0.02	0.02	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Magnesium, Dissolved	17	1	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Magnesium, Dissolved	17	1	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Magnesium, Dissolved	15	1	mg/L		E200.7
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Manganese, Dissolved	0.001	0.001	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Manganese, Dissolved	0.001	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Molybdenum, Dissolved	0.007	0.005	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Molybdenum, Dissolved	0.007	0.005	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Molybdenum, Dissolved	0.007	0.005	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8

1GW-1056	Natural Sample	H14090136-002	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Potassium, Dissolved	3	1	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Potassium, Dissolved	3	1	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Selenium, Dissolved	0.004	0.001	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Selenium, Dissolved	0.004	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Selenium, Dissolved	0.004	0.001	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Sodium, Dissolved	28	1	mg/L		E200.7
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Sodium, Dissolved	28	1	mg/L		E200.7
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Sodium, Dissolved	26	1	mg/L		E200.7
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Sulfate	190	1	mg/L		E300.0
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Sulfate	190	1	mg/L		E300.0
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Sulfate	180	1	mg/L		E300.0
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Uranium, Dissolved	0.0461	0.0002	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Uranium, Dissolved	0.0461	0.0002	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Uranium, Dissolved	0.0346	0.0002	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
1GW-1056	Natural Sample	H14060159-013	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
1GW-1056	Field Duplicate	H14060159-015	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
1GW-1056	Natural Sample	H14090136-002	9/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
GW-1003	Natural Sample	H14090136-015	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
GW-1003	Natural Sample	H14090136-015	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Arsenic, Dissolved	0.01	0.001	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Barium, Dissolved	0.038	0.003	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
GW-1003	Natural Sample	H14090136-015	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-1003	Natural Sample	H14090136-015	9/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Calcium, Dissolved	33	1	mg/L		E200.7

GW-1003	Natural Sample	H14090136-015	9/4/2014	Chloride	13	1	mg/L		E300.0
GW-1003	Natural Sample	H14090136-015	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Hardness as CaCO3	109	1	mg/L		A2340 B
GW-1003	Natural Sample	H14090136-015	9/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-1003	Natural Sample	H14090136-015	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Magnesium, Dissolved	7	1	mg/L		E200.7
GW-1003	Natural Sample	H14090136-015	9/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
GW-1003	Natural Sample	H14090136-015	9/4/2014	Molybdenum, Dissolved	0.011	0.005	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-1003	Natural Sample	H14090136-015	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Sodium, Dissolved	31	1	mg/L		E200.7
GW-1003	Natural Sample	H14090136-015	9/4/2014	Sulfate	43	1	mg/L		E300.0
GW-1003	Natural Sample	H14090136-015	9/4/2014	Uranium, Dissolved	0.0026	0.0002	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-1003	Natural Sample	H14090136-015	9/4/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Alkalinity, Total as CaCO3	290	4	mg/L		A2320 B
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Aluminum, Dissolved	0.079	0.009	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Barium, Dissolved	0.024	0.003	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Bicarbonate Alkalinity as HCO3	350	4	mg/L		A2320 B
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Calcium, Dissolved	118	1	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Chloride	24	1	mg/L		E300.0
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Hardness as CaCO3	386	1	mg/L		A2340 B

GW-1010R	Natural Sample	H14090136-019	9/3/2014	Iron, Dissolved	0.08	0.02	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Magnesium, Dissolved	22	1	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Manganese, Dissolved	0.006	0.001	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Molybdenum, Dissolved	0.009	0.005	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Potassium, Dissolved	6	1	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Sodium, Dissolved	144	1	mg/L		E200.7
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Sulfate	430	1	mg/L		E300.0
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Uranium, Dissolved	0.0948	0.0002	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-1010R	Natural Sample	H14090136-019	9/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Alkalinity, Total as CaCO3	130	4	mg/L		A2320 B
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Aluminum, Dissolved	0.07	0.009	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Arsenic, Dissolved	0.004	0.001	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Barium, Dissolved	0.033	0.003	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Bicarbonate Alkalinity as HCO3	160	4	mg/L		A2320 B
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Cadmium, Dissolved	0.00282	0.00003	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Calcium, Dissolved	83	1	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Chloride	18	1	mg/L		E300.0
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Copper, Dissolved	0.22	0.001	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Hardness as CaCO3	265	1	mg/L		A2340 B
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Iron, Dissolved	0.13	0.02	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Lead, Dissolved	0.0013	0.0003	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Magnesium, Dissolved	14	1	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Manganese, Dissolved	3.41	0.001	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1

GW-1052R	Natural Sample	H14090136-020	9/3/2014	Molybdenum, Dissolved	0.022	0.005	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Nickel, Dissolved	0.002	0.002	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Potassium, Dissolved	8	1	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Sodium, Dissolved	98	1	mg/L		E200.7
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Sulfate	330	1	mg/L		E300.0
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Uranium, Dissolved	0.0029	0.0002	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-1052R	Natural Sample	H14090136-020	9/3/2014	Zinc, Dissolved	1.83	0.008	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Alkalinity, Total as CaCO3	95	4	mg/L		A2320 B
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Aluminum, Dissolved	10.6	0.009	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Antimony, Dissolved	0.0021	0.0009	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Arsenic, Dissolved	0.062	0.001	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Barium, Dissolved	0.466	0.003	mg/L	J	E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Beryllium, Dissolved	0.0019	0.0008	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Boron, Dissolved	0.4	0.1	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Cadmium, Dissolved	0.00044	0.00003	mg/L	J	E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Calcium, Dissolved	20	1	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Chloride	18	1	mg/L		E300.0
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Copper, Dissolved	0.036	0.001	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Hardness as CaCO3	66	1	mg/L		A2340 B
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Iron, Dissolved	5.6	0.02	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Lead, Dissolved	0.0196	0.0003	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Magnesium, Dissolved	4	1	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Manganese, Dissolved	0.279	0.001	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Mercury, Dissolved	0.000028	0.000005	mg/L		E245.1
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Molybdenum, Dissolved	0.009	0.005	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Nickel, Dissolved	0.007	0.002	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Potassium, Dissolved	7	1	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Silver, Dissolved	0.0002	0.0002	mg/L		E200.8

GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Sodium, Dissolved	103	1	mg/L		E200.7
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Sulfate	110	1	mg/L		E300.0
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Uranium, Dissolved	0.0038	0.0002	mg/L	J	E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-CR-BG	Natural Sample	H14090136-022	9/5/2014	Zinc, Dissolved	0.357	0.008	mg/L	J	E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Alkalinity, Total as CaCO3	96	4	mg/L		A2320 B
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Aluminum, Dissolved	0.03	0.009	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Barium, Dissolved	0.022	0.003	mg/L	J	E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Cadmium, Dissolved	0.00239	0.00003	mg/L	J	E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Calcium, Dissolved	46	1	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Chloride	36	1	mg/L		E300.0
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Copper, Dissolved	0.004	0.001	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Hardness as CaCO3	158	1	mg/L		A2340 B
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Iron, Dissolved	0.01	0.02	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Magnesium, Dissolved	10	1	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Manganese, Dissolved	0.039	0.001	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Mercury, Dissolved	0.000008	0.000005	mg/L		E245.1
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Nickel, Dissolved	0.003	0.002	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Potassium, Dissolved	3	1	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Sodium, Dissolved	70	1	mg/L		E200.7
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Sulfate	170	1	mg/L		E300.0
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Uranium, Dissolved	0.0013	0.0002	mg/L	J	E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-CR-ES	Natural Sample	H14090136-038	9/5/2014	Zinc, Dissolved	0.625	0.008	mg/L	J	E200.8

GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Aluminum, Dissolved	0.218	0.009	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Antimony, Dissolved	0.0015	0.0009	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Barium, Dissolved	0.27	0.003	mg/L	J	E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Bicarbonate Alkalinity as HCO3	140	4	mg/L		A2320 B
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Cadmium, Dissolved	0.0686	0.00003	mg/L	J	E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Calcium, Dissolved	41	1	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Chloride	29	1	mg/L		E300.0
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Copper, Dissolved	0.03	0.001	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Hardness as CaCO3	130	1	mg/L		A2340 B
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Iron, Dissolved	0.15	0.02	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Lead, Dissolved	0.003	0.0003	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Magnesium, Dissolved	7	1	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Manganese, Dissolved	2.07	0.001	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Mercury, Dissolved	0.00038	0.000005	mg/L		E245.1
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Molybdenum, Dissolved	0.013	0.005	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Nickel, Dissolved	0.004	0.002	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Sodium, Dissolved	36	1	mg/L		E200.7
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Sulfate	64	1	mg/L		E300.0
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Uranium, Dissolved	0.0041	0.0002	mg/L	J	E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-CR-WS	Natural Sample	H14090136-023	9/5/2014	Zinc, Dissolved	0.599	0.008	mg/L	J	E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Alkalinity, Total as CaCO3	40	4	mg/L		A2320 B
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Aluminum, Dissolved	0.029	0.009	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Barium, Dissolved	0.035	0.003	mg/L	J	E200.8

GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Bicarbonate Alkalinity as HCO3	48	4	mg/L		A2320 B
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Cadmium, Dissolved	0.00032	0.00003	mg/L	J	E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Calcium, Dissolved	34	1	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Chloride	23	1	mg/L		E300.0
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Hardness as CaCO3	114	1	mg/L		A2340 B
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Magnesium, Dissolved	7	1	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Manganese, Dissolved	0.312	0.001	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Mercury, Dissolved	0.00001	0.000005	mg/L		E245.1
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Nickel, Dissolved	0.005	0.002	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Sodium, Dissolved	23	1	mg/L		E200.7
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Sulfate	99	1	mg/L		E300.0
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Uranium, Dissolved	0.0002	0.0002	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FM-BG	Natural Sample	H14090136-042	9/5/2014	Zinc, Dissolved	0.009	0.008	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Barium, Dissolved	0.038	0.003	mg/L	J	E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Cadmium, Dissolved	0.00005	0.00003	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Calcium, Dissolved	45	1	mg/L		E200.7

GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Chloride	30	1	mg/L		E300.0
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Hardness as CaCO3	148	1	mg/L		A2340 B
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Iron, Dissolved	0.02	0.02	mg/L		E200.7
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Magnesium, Dissolved	9	1	mg/L		E200.7
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Manganese, Dissolved	0.966	0.001	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Mercury, Dissolved	0.000016	0.000005	mg/L		E245.1
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Nickel, Dissolved	0.002	0.002	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Potassium, Dissolved	4	1	mg/L		E200.7
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Sodium, Dissolved	29	1	mg/L		E200.7
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Sulfate	78	1	mg/L		E300.0
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Uranium, Dissolved	0.0015	0.0002	mg/L	J	E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FM-ES	Natural Sample	H14090136-041	9/5/2014	Zinc, Dissolved	0.306	0.008	mg/L	J	E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Alkalinity, Total as CaCO3	140	4	mg/L		A2320 B
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Alkalinity, Total as CaCO3	130	4	mg/L		A2320 B
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Aluminum, Dissolved	0.017	0.009	mg/L		E200.7
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Aluminum, Dissolved	0.037	0.009	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Antimony, Dissolved	0.0014	0.0009	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Barium, Dissolved	0.220	0.003	mg/L	J	E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Barium, Dissolved	0.116	0.003	mg/L	J	E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Bicarbonate Alkalinity as HCO3	170	4	mg/L		A2320 B
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Bicarbonate Alkalinity as HCO3	160	4	mg/L		A2320 B
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7

GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Cadmium, Dissolved	0.00018	0.00003	mg/L	J	E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Calcium, Dissolved	53	1	mg/L		E200.7
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Calcium, Dissolved	50	1	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Chloride	23	1	mg/L		E300.0
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Chloride	23	1	mg/L		E300.0
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Hardness as CaCO3	178	1	mg/L		A2340 B
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Hardness as CaCO3	168	1	mg/L		A2340 B
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Magnesium, Dissolved	11	1	mg/L		E200.7
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Magnesium, Dissolved	10	1	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Manganese, Dissolved	1.48	0.001	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Manganese, Dissolved	1.6	0.001	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Mercury, Dissolved	0.000008	0.000005	mg/L		E245.1
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Molybdenum, Dissolved	0.014	0.005	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Molybdenum, Dissolved	0.009	0.005	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Nickel, Dissolved	0.003	0.002	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Nickel, Dissolved	0.003	0.002	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Potassium, Dissolved	4	1	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Sodium, Dissolved	25	1	mg/L		E200.7
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Sodium, Dissolved	23	1	mg/L		E200.7
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Sulfate	58	1	mg/L		E300.0
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Sulfate	59	1	mg/L		E300.0
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Uranium, Dissolved	0.0168	0.0002	mg/L	J	E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Uranium, Dissolved	0.007	0.0002	mg/L	J	E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FM-WS	Natural Sample	H14090136-040	9/5/2014	Zinc, Dissolved	0.12	0.008	mg/L	J	E200.8
GW-FM-WS	Field Duplicate	H14090136-039	9/5/2014	Zinc, Dissolved	0.017	0.008	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Alkalinity, Total as CaCO3	880	4	mg/L		A2320 B
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Aluminum, Dissolved	0.033	0.009	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Antimony, Dissolved	0.0111	0.0009	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Arsenic, Dissolved	0.013	0.001	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Barium, Dissolved	0.143	0.003	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Bicarbonate Alkalinity as HCO3	1100	4	mg/L		A2320 B
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Calcium, Dissolved	33	1	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Chloride	ND	1	mg/L		E300.0
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Copper, Dissolved	0.005	0.001	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Hardness as CaCO3	112	1	mg/L		A2340 B
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Iron, Dissolved	0.04	0.02	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Magnesium, Dissolved	7	1	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Manganese, Dissolved	0.224	0.001	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Mercury, Dissolved	0.00001	0.000005	mg/L		E245.1
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Molybdenum, Dissolved	0.01	0.005	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Nickel, Dissolved	0.002	0.002	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Potassium, Dissolved	2	1	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Sodium, Dissolved	9	1	mg/L		E200.7
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Sulfate	16	1	mg/L		E300.0
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Uranium, Dissolved	0.0151	0.0002	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FR-BG	Natural Sample	H14090136-045	9/4/2014	Zinc, Dissolved	0.037	0.008	mg/L	B	E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Alkalinity, Total as CaCO3	660	4	mg/L		A2320 B
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Antimony, Dissolved	0.0023	0.0009	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Barium, Dissolved	0.203	0.003	mg/L	J	E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Bicarbonate Alkalinity as HCO3	800	4	mg/L		A2320 B
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Cadmium, Dissolved	0.00020	0.00003	mg/L	J	E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Calcium, Dissolved	125	1	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Chloride	30	1	mg/L		E300.0
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Copper, Dissolved	0.004	0.001	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Hardness as CaCO3	410	1	mg/L		A2340 B
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Magnesium, Dissolved	24	1	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Manganese, Dissolved	0.32	0.001	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Molybdenum, Dissolved	0.034	0.005	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Nickel, Dissolved	0.002	0.002	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Potassium, Dissolved	4	1	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Sodium, Dissolved	19	1	mg/L		E200.7
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Sulfate	280	1	mg/L		E300.0
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Uranium, Dissolved	0.118	0.0002	mg/L	J	E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FR-ES	Natural Sample	H14090136-043	9/5/2014	Zinc, Dissolved	0.059	0.008	mg/L	J	E200.8

GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Alkalinity, Total as CaCO3	490	4	mg/L		A2320 B
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Antimony, Dissolved	0.0058	0.0009	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Barium, Dissolved	0.168	0.003	mg/L	J	E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Bicarbonate Alkalinity as HCO3	600	4	mg/L		A2320 B
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Cadmium, Dissolved	0.00012	0.00003	mg/L	J	E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Calcium, Dissolved	46	1	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Chloride	1	1	mg/L		E300.0
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Copper, Dissolved	0.005	0.001	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Hardness as CaCO3	151	1	mg/L		A2340 B
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Magnesium, Dissolved	9	1	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Manganese, Dissolved	0.024	0.001	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Mercury, Dissolved	0.000021	0.000005	mg/L		E245.1
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Molybdenum, Dissolved	0.016	0.005	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Potassium, Dissolved	3	1	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Sodium, Dissolved	12	1	mg/L		E200.7
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Sulfate	32	1	mg/L		E300.0
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Uranium, Dissolved	0.0635	0.0002	mg/L	J	E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-FR-WS	Natural Sample	H14090136-044	9/5/2014	Zinc, Dissolved	0.032	0.008	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Alkalinity, Total as CaCO3	270	4	mg/L		A2320 B
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Arsenic, Dissolved	0.033	0.001	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Barium, Dissolved	0.032	0.003	mg/L		E200.8

GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Bicarbonate Alkalinity as HCO3	330	4	mg/L		A2320 B
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Calcium, Dissolved	34	1	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Chloride	75	1	mg/L		E300.0
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Hardness as CaCO3	118	1	mg/L		A2340 B
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Magnesium, Dissolved	8	1	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Manganese, Dissolved	0.003	0.001	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Molybdenum, Dissolved	0.045	0.005	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Sodium, Dissolved	219	1	mg/L		E200.7
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Sulfate	250	1	mg/L		E300.0
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Uranium, Dissolved	0.0025	0.0002	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-MC-BG	Natural Sample	H14090136-033	9/4/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Alkalinity, Total as CaCO3	42	4	mg/L		A2320 B
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Aluminum, Dissolved	0.253	0.009	mg/L	J	E200.7
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Barium, Dissolved	0.03	0.003	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Bicarbonate Alkalinity as HCO3	51	4	mg/L		A2320 B
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Cadmium, Dissolved	0.0247	0.00003	mg/L	J	E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Calcium, Dissolved	28	1	mg/L		E200.7

GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Chloride	42	1	mg/L		E300.0
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Cobalt, Dissolved	0.01	0.01	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Copper, Dissolved	0.301	0.001	mg/L	J	E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Hardness as CaCO3	101	1	mg/L		A2340 B
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Iron, Dissolved	0.19	0.02	mg/L		E200.7
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Magnesium, Dissolved	8	1	mg/L		E200.7
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Manganese, Dissolved	4.66	0.001	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Mercury, Dissolved	0.000009	0.000005	mg/L		E245.1
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Nickel, Dissolved	0.014	0.002	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Sodium, Dissolved	31	1	mg/L		E200.7
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Sulfate	100	1	mg/L		E300.0
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Uranium, Dissolved	0.0015	0.0002	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-MC-NS	Natural Sample	H14090136-028	9/4/2014	Zinc, Dissolved	7.79	0.008	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Alkalinity, Total as CaCO3	96	4	mg/L		A2320 B
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Aluminum, Dissolved	0.012	0.009	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Barium, Dissolved	0.106	0.003	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Bicarbonate Alkalinity as HCO3	120	4	mg/L		A2320 B
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Cadmium, Dissolved	0.00619	0.00003	mg/L	J	E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Calcium, Dissolved	40	1	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Chloride	43	1	mg/L		E300.0
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Copper, Dissolved	0.043	0.001	mg/L	J	E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Hardness as CaCO3	148	1	mg/L		A2340 B

GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Iron, Dissolved	0.02	0.02	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Magnesium, Dissolved	12	1	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Manganese, Dissolved	5.68	0.001	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Mercury, Dissolved	0.000019	0.000005	mg/L		E245.1
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Molybdenum, Dissolved	0.031	0.005	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Nickel, Dissolved	0.015	0.002	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Potassium, Dissolved	6	1	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Sodium, Dissolved	34	1	mg/L		E200.7
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Sulfate	91	1	mg/L		E300.0
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Uranium, Dissolved	0.0015	0.0002	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-MC-SS	Natural Sample	H14090136-037	9/4/2014	Zinc, Dissolved	3.81	0.008	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Alkalinity, Total as CaCO3	140	4	mg/L		A2320 B
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Barium, Dissolved	0.061	0.003	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Bicarbonate Alkalinity as HCO3	170	4	mg/L		A2320 B
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Cadmium, Dissolved	0.00005	0.00003	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Calcium, Dissolved	60	1	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Chloride	35	1	mg/L		E300.0
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Hardness as CaCO3	205	1	mg/L		A2340 B
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Magnesium, Dissolved	14	1	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Molybdenum, Dissolved	0.013	0.005	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Sodium, Dissolved	39	1	mg/L		E200.7
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Sulfate	97	1	mg/L		E300.0
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Uranium, Dissolved	0.0068	0.0002	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-RK-BG	Natural Sample	H14090136-029	9/4/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Alkalinity, Total as CaCO3	19	4	mg/L		A2320 B
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Aluminum, Dissolved	0.307	0.009	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Barium, Dissolved	0.024	0.003	mg/L	J	E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Bicarbonate Alkalinity as HCO3	23	4	mg/L		A2320 B
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Cadmium, Dissolved	0.00133	0.00003	mg/L	J	E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Calcium, Dissolved	68	1	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Chloride	48	1	mg/L		E300.0
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Copper, Dissolved	0.003	0.001	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Hardness as CaCO3	236	1	mg/L		A2340 B
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Iron, Dissolved	0.16	0.02	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Magnesium, Dissolved	16	1	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Manganese, Dissolved	1.01	0.001	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Nickel, Dissolved	0.025	0.002	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Potassium, Dissolved	4	1	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Sodium, Dissolved	21	1	mg/L		E200.7
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Sulfate	220	1	mg/L		E300.0
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-ST-BG	Natural Sample	H14090136-018	9/5/2014	Zinc, Dissolved	0.808	0.008	mg/L	J	E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Alkalinity, Total as CaCO3	6	4	mg/L		A2320 B
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Aluminum, Dissolved	0.17	0.009	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Barium, Dissolved	0.194	0.003	mg/L	J	E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Bicarbonate Alkalinity as HCO3	6	4	mg/L		A2320 B
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Cadmium, Dissolved	0.0189	0.00003	mg/L	J	E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Calcium, Dissolved	32	1	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Chloride	35	1	mg/L		E300.0
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Copper, Dissolved	1.19	0.001	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Hardness as CaCO3	101	1	mg/L		A2340 B
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Magnesium, Dissolved	5	1	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Manganese, Dissolved	1.26	0.001	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Mercury, Dissolved	0.000009	0.000005	mg/L		E245.1
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Nickel, Dissolved	0.009	0.002	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Potassium, Dissolved	5	1	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Sodium, Dissolved	22	1	mg/L		E200.7
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Sulfate	110	1	mg/L		E300.0
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Uranium, Dissolved	0.0004	0.0002	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-ST-ES	Natural Sample	H14090136-026	9/5/2014	Zinc, Dissolved	3.5	0.008	mg/L	J	E200.8

GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Alkalinity, Total as CaCO3	33	4	mg/L		A2320 B
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Aluminum, Dissolved	0.12	0.009	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Barium, Dissolved	0.024	0.003	mg/L	J	E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Bicarbonate Alkalinity as HCO3	40	4	mg/L		A2320 B
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Cadmium, Dissolved	0.0222	0.00003	mg/L	J	E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Calcium, Dissolved	33	1	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Chloride	38	1	mg/L		E300.0
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Copper, Dissolved	0.116	0.001	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Hardness as CaCO3	111	1	mg/L		A2340 B
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Magnesium, Dissolved	7	1	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Manganese, Dissolved	2.17	0.001	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Nickel, Dissolved	0.013	0.002	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Potassium, Dissolved	4	1	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Sodium, Dissolved	21	1	mg/L		E200.7
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Sulfate	87	1	mg/L		E300.0
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Uranium, Dissolved	0.0008	0.0002	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
GW-ST-WS	Natural Sample	H14090136-027	9/5/2014	Zinc, Dissolved	3.87	0.008	mg/L	J	E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Alkalinity, Total as CaCO3	180	4	mg/L		A2320 B
LYP-07	Natural Sample	H14090136-010	9/3/2014	Alkalinity, Total as CaCO3	180	4	mg/L		A2320 B
LYP-07	Natural Sample	H14060159-008	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Antimony, Dissolved	0.0007	0.0009	mg/L		E200.8

LYP-07	Natural Sample	H14090136-010	9/3/2014	Antimony, Dissolved	0.0005	0.0009	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Barium, Dissolved	0.057	0.003	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Barium, Dissolved	0.055	0.003	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Bicarbonate Alkalinity as HCO3	210	4	mg/L		A2320 B
LYP-07	Natural Sample	H14090136-010	9/3/2014	Bicarbonate Alkalinity as HCO3	220	4	mg/L		A2320 B
LYP-07	Natural Sample	H14060159-008	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Calcium, Dissolved	83	1	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Calcium, Dissolved	82	1	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Chloride	20	1	mg/L		E300.0
LYP-07	Natural Sample	H14090136-010	9/3/2014	Chloride	23	1	mg/L		E300.0
LYP-07	Natural Sample	H14060159-008	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Hardness as CaCO3	270	1	mg/L		A2340 B
LYP-07	Natural Sample	H14090136-010	9/3/2014	Hardness as CaCO3	269	1	mg/L		A2340 B
LYP-07	Natural Sample	H14060159-008	6/4/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Magnesium, Dissolved	15	1	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Magnesium, Dissolved	15	1	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Manganese, Dissolved	0.07	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Manganese, Dissolved	0.06	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYP-07	Natural Sample	H14090136-010	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

LYP-07	Natural Sample	H14060159-008	6/4/2014	Molybdenum, Dissolved	0.013	0.005	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Molybdenum, Dissolved	0.01	0.005	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Nickel, Dissolved	0.003	0.002	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Nickel, Dissolved	0.004	0.002	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Potassium, Dissolved	5	1	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Sodium, Dissolved	32	1	mg/L		E200.7
LYP-07	Natural Sample	H14090136-010	9/3/2014	Sodium, Dissolved	32	1	mg/L		E200.7
LYP-07	Natural Sample	H14060159-008	6/4/2014	Sulfate	160	1	mg/L		E300.0
LYP-07	Natural Sample	H14090136-010	9/3/2014	Sulfate	150	1	mg/L		E300.0
LYP-07	Natural Sample	H14060159-008	6/4/2014	Uranium, Dissolved	0.0872	0.0002	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Uranium, Dissolved	0.0579	0.0002	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYP-07	Natural Sample	H14060159-008	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
LYP-07	Natural Sample	H14090136-010	9/3/2014	Zinc, Dissolved	0.02	0.008	mg/L	B	E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Alkalinity, Total as CaCO3	160	4	mg/L		A2320 B
MW-01	Natural Sample	H14090136-035	9/4/2014	Aluminum, Dissolved	0.094	0.009	mg/L	J	E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Arsenic, Dissolved	0.011	0.001	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Barium, Dissolved	0.025	0.003	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Bicarbonate Alkalinity as HCO3	200	4	mg/L		A2320 B
MW-01	Natural Sample	H14090136-035	9/4/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Cadmium, Dissolved	0.00104	0.00003	mg/L	J	E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Calcium, Dissolved	108	1	mg/L		E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Chloride	35	1	mg/L		E300.0
MW-01	Natural Sample	H14090136-035	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Copper, Dissolved	0.079	0.001	mg/L	J	E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Hardness as CaCO3	354	1	mg/L		A2340 B

MW-01	Natural Sample	H14090136-035	9/4/2014	Iron, Dissolved	0.2	0.02	mg/L		E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Lead, Dissolved	0.0003	0.0003	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Magnesium, Dissolved	20	1	mg/L		E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Manganese, Dissolved	0.612	0.001	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1
MW-01	Natural Sample	H14090136-035	9/4/2014	Molybdenum, Dissolved	0.003	0.005	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Potassium, Dissolved	7	1	mg/L		E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Sodium, Dissolved	32	1	mg/L		E200.7
MW-01	Natural Sample	H14090136-035	9/4/2014	Sulfate	260	1	mg/L		E300.0
MW-01	Natural Sample	H14090136-035	9/4/2014	Uranium, Dissolved	0.0066	0.0002	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-01	Natural Sample	H14090136-035	9/4/2014	Zinc, Dissolved	0.146	0.008	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Alkalinity, Total as CaCO3	8	4	mg/L		A2320 B
MW-10	Natural Sample	H14090136-031	9/4/2014	Aluminum, Dissolved	0.26	0.009	mg/L	J	E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Barium, Dissolved	0.079	0.003	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Bicarbonate Alkalinity as HCO3	9	4	mg/L		A2320 B
MW-10	Natural Sample	H14090136-031	9/4/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Cadmium, Dissolved	0.00342	0.00003	mg/L	J	E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Calcium, Dissolved	44	1	mg/L		E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Chloride	49	1	mg/L		E300.0
MW-10	Natural Sample	H14090136-031	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Cobalt, Dissolved	0.02	0.01	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Copper, Dissolved	0.297	0.001	mg/L	J	E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Hardness as CaCO3	154	1	mg/L		A2340 B
MW-10	Natural Sample	H14090136-031	9/4/2014	Iron, Dissolved	0.02	0.02	mg/L		E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Lead, Dissolved	0.0006	0.0003	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Magnesium, Dissolved	11	1	mg/L		E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Manganese, Dissolved	4.92	0.001	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1

MW-10	Natural Sample	H14090136-031	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Nickel, Dissolved	0.009	0.002	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Potassium, Dissolved	6	1	mg/L		E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Sodium, Dissolved	54	1	mg/L		E200.7
MW-10	Natural Sample	H14090136-031	9/4/2014	Sulfate	240	1	mg/L		E300.0
MW-10	Natural Sample	H14090136-031	9/4/2014	Uranium, Dissolved	0.0008	0.0002	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-10	Natural Sample	H14090136-031	9/4/2014	Zinc, Dissolved	3.83	0.008	mg/L	B	E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
MW-2A	Natural Sample	H14090136-008	9/3/2014	Alkalinity, Total as CaCO3	120	4	mg/L		A2320 B
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Alkalinity, Total as CaCO3	130	4	mg/L		A2320 B
MW-2A	Natural Sample	H14060159-014	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Aluminum, Dissolved	0.01	0.009	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Antimony, Dissolved	ND	0.0005	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Arsenic, Dissolved	0.011	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Arsenic, Dissolved	0.01	0.001	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Arsenic, Dissolved	0.01	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Barium, Dissolved	0.013	0.003	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Barium, Dissolved	0.013	0.003	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Barium, Dissolved	0.013	0.003	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
MW-2A	Natural Sample	H14090136-008	9/3/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
MW-2A	Natural Sample	H14060159-014	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8

MW-2A	Natural Sample	H14090136-008	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Calcium, Dissolved	94	1	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Calcium, Dissolved	86	1	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Calcium, Dissolved	87	1	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Chloride	4	1	mg/L		E300.0
MW-2A	Natural Sample	H14090136-008	9/3/2014	Chloride	4	1	mg/L		E300.0
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Chloride	4	1	mg/L		E300.0
MW-2A	Natural Sample	H14060159-014	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Hardness as CaCO3	295	1	mg/L		A2340 B
MW-2A	Natural Sample	H14090136-008	9/3/2014	Hardness as CaCO3	270	1	mg/L		A2340 B
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Hardness as CaCO3	271	1	mg/L		A2340 B
MW-2A	Natural Sample	H14060159-014	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Magnesium, Dissolved	14	1	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Magnesium, Dissolved	13	1	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Magnesium, Dissolved	13	1	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
MW-2A	Natural Sample	H14090136-008	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

MW-2A	Natural Sample	H14060159-014	6/4/2014	Molybdenum, Dissolved	0.009	0.005	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Molybdenum, Dissolved	0.008	0.005	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Molybdenum, Dissolved	0.008	0.005	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Potassium, Dissolved	4	1	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Selenium, Dissolved	0.01	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Selenium, Dissolved	0.01	0.001	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Selenium, Dissolved	0.01	0.001	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Sodium, Dissolved	28	1	mg/L		E200.7
MW-2A	Natural Sample	H14090136-008	9/3/2014	Sodium, Dissolved	26	1	mg/L		E200.7
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Sodium, Dissolved	26	1	mg/L		E200.7
MW-2A	Natural Sample	H14060159-014	6/4/2014	Sulfate	240	1	mg/L		E300.0
MW-2A	Natural Sample	H14090136-008	9/3/2014	Sulfate	220	1	mg/L		E300.0
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Sulfate	220	1	mg/L		E300.0
MW-2A	Natural Sample	H14060159-014	6/4/2014	Uranium, Dissolved	0.0457	0.0002	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Uranium, Dissolved	0.0388	0.0002	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Uranium, Dissolved	0.0393	0.0002	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2A	Natural Sample	H14060159-014	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
MW-2A	Natural Sample	H14090136-008	9/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
MW-2A	Field Duplicate	H14090136-004	9/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Alkalinity, Total as CaCO3	88	4	mg/L		A2320 B
MW-2B	Natural Sample	H14090136-009	9/3/2014	Alkalinity, Total as CaCO3	94	4	mg/L		A2320 B
MW-2B	Natural Sample	H14060159-003	6/4/2014	Aluminum, Dissolved	0.101	0.009	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8

MW-2B	Natural Sample	H14090136-009	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Arsenic, Dissolved	0.01	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Arsenic, Dissolved	0.01	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Barium, Dissolved	0.028	0.003	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Barium, Dissolved	0.027	0.003	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
MW-2B	Natural Sample	H14090136-009	9/3/2014	Bicarbonate Alkalinity as HCO3	110	4	mg/L		A2320 B
MW-2B	Natural Sample	H14060159-003	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Calcium, Dissolved	52	1	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Calcium, Dissolved	56	1	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Chloride	17	1	mg/L		E300.0
MW-2B	Natural Sample	H14090136-009	9/3/2014	Chloride	21	1	mg/L		E300.0
MW-2B	Natural Sample	H14060159-003	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Hardness as CaCO3	187	1	mg/L		A2340 B
MW-2B	Natural Sample	H14090136-009	9/3/2014	Hardness as CaCO3	199	1	mg/L		A2340 B
MW-2B	Natural Sample	H14060159-003	6/4/2014	Iron, Dissolved	0.06	0.02	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Magnesium, Dissolved	14	1	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Magnesium, Dissolved	14	1	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Manganese, Dissolved	0.018	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Manganese, Dissolved	0.004	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
MW-2B	Natural Sample	H14090136-009	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

MW-2B	Natural Sample	H14060159-003	6/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Sodium, Dissolved	22	1	mg/L		E200.7
MW-2B	Natural Sample	H14090136-009	9/3/2014	Sodium, Dissolved	23	1	mg/L		E200.7
MW-2B	Natural Sample	H14060159-003	6/4/2014	Sulfate	120	1	mg/L		E300.0
MW-2B	Natural Sample	H14090136-009	9/3/2014	Sulfate	120	1	mg/L		E300.0
MW-2B	Natural Sample	H14060159-003	6/4/2014	Uranium, Dissolved	0.0059	0.0002	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Uranium, Dissolved	0.0049	0.0002	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2B	Natural Sample	H14060159-003	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
MW-2B	Natural Sample	H14090136-009	9/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Alkalinity, Total as CaCO3	100	4	mg/L		A2320 B
MW-2C	Natural Sample	H14090136-014	9/3/2014	Alkalinity, Total as CaCO3	110	4	mg/L		A2320 B
MW-2C	Natural Sample	H14060159-012	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
MW-2C	Natural Sample	H14090136-014	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Barium, Dissolved	0.018	0.003	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Barium, Dissolved	0.017	0.003	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
MW-2C	Natural Sample	H14090136-014	9/3/2014	Bicarbonate Alkalinity as HCO3	130	4	mg/L		A2320 B
MW-2C	Natural Sample	H14060159-012	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7

MW-2C	Natural Sample	H14090136-014	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Calcium, Dissolved	65	1	mg/L		E200.7
MW-2C	Natural Sample	H14090136-014	9/3/2014	Calcium, Dissolved	67	1	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Chloride	18	1	mg/L		E300.0
MW-2C	Natural Sample	H14090136-014	9/3/2014	Chloride	20	1	mg/L		E300.0
MW-2C	Natural Sample	H14060159-012	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Hardness as CaCO3	225	1	mg/L		A2340 B
MW-2C	Natural Sample	H14090136-014	9/3/2014	Hardness as CaCO3	229	1	mg/L		A2340 B
MW-2C	Natural Sample	H14060159-012	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
MW-2C	Natural Sample	H14090136-014	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Magnesium, Dissolved	15	1	mg/L		E200.7
MW-2C	Natural Sample	H14090136-014	9/3/2014	Magnesium, Dissolved	15	1	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
MW-2C	Natural Sample	H14090136-014	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
MW-2C	Natural Sample	H14060159-012	6/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2C	Natural Sample	H14090136-014	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

MW-2C	Natural Sample	H14060159-012	6/4/2014	Sodium, Dissolved	32	1	mg/L		E200.7
MW-2C	Natural Sample	H14090136-014	9/3/2014	Sodium, Dissolved	31	1	mg/L		E200.7
MW-2C	Natural Sample	H14060159-012	6/4/2014	Sulfate	160	1	mg/L		E300.0
MW-2C	Natural Sample	H14090136-014	9/3/2014	Sulfate	170	1	mg/L		E300.0
MW-2C	Natural Sample	H14060159-012	6/4/2014	Uranium, Dissolved	0.0089	0.0002	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Uranium, Dissolved	0.0084	0.0002	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2C	Natural Sample	H14060159-012	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
MW-2C	Natural Sample	H14090136-014	9/3/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Alkalinity, Total as CaCO3	150	4	mg/L		A2320 B
MW-2D	Natural Sample	H14090136-005	9/3/2014	Alkalinity, Total as CaCO3	150	4	mg/L		A2320 B
MW-2D	Natural Sample	H14060159-011	6/4/2014	Aluminum, Dissolved	0.513	0.009	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Arsenic, Dissolved	0.007	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Barium, Dissolved	0.048	0.003	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Barium, Dissolved	0.04	0.003	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Bicarbonate Alkalinity as HCO3	180	4	mg/L		A2320 B
MW-2D	Natural Sample	H14090136-005	9/3/2014	Bicarbonate Alkalinity as HCO3	190	4	mg/L		A2320 B
MW-2D	Natural Sample	H14060159-011	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Calcium, Dissolved	89	1	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Calcium, Dissolved	87	1	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Chloride	23	1	mg/L		E300.0
MW-2D	Natural Sample	H14090136-005	9/3/2014	Chloride	24	1	mg/L		E300.0
MW-2D	Natural Sample	H14060159-011	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8

MW-2D	Natural Sample	H14090136-005	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Copper, Dissolved	0.004	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Copper, Dissolved	0.005	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Hardness as CaCO3	301	1	mg/L		A2340 B
MW-2D	Natural Sample	H14090136-005	9/3/2014	Hardness as CaCO3	291	1	mg/L		A2340 B
MW-2D	Natural Sample	H14060159-011	6/4/2014	Iron, Dissolved	0.78	0.02	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Iron, Dissolved	0.03	0.02	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Lead, Dissolved	0.0013	0.0003	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Magnesium, Dissolved	19	1	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Magnesium, Dissolved	18	1	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Manganese, Dissolved	0.048	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Manganese, Dissolved	0.002	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
MW-2D	Natural Sample	H14090136-005	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
MW-2D	Natural Sample	H14060159-011	6/4/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Potassium, Dissolved	4	1	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Selenium, Dissolved	0.004	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Selenium, Dissolved	0.003	0.001	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Sodium, Dissolved	28	1	mg/L		E200.7
MW-2D	Natural Sample	H14090136-005	9/3/2014	Sodium, Dissolved	26	1	mg/L		E200.7
MW-2D	Natural Sample	H14060159-011	6/4/2014	Sulfate	190	1	mg/L		E300.0
MW-2D	Natural Sample	H14090136-005	9/3/2014	Sulfate	190	1	mg/L		E300.0
MW-2D	Natural Sample	H14060159-011	6/4/2014	Uranium, Dissolved	0.0481	0.0002	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Uranium, Dissolved	0.0502	0.0002	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
MW-2D	Natural Sample	H14060159-011	6/4/2014	Zinc, Dissolved	0.011	0.008	mg/L		E200.8
MW-2D	Natural Sample	H14090136-005	9/3/2014	Zinc, Dissolved	0.012	0.008	mg/L	B	E200.8

P-06A	Natural Sample	H14090136-011	9/3/2014	Alkalinity, Total as CaCO3	130	4	mg/L		A2320 B
P-06A	Natural Sample	H14090136-011	9/3/2014	Aluminum, Dissolved	0.08	0.009	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Barium, Dissolved	0.03	0.003	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Bicarbonate Alkalinity as HCO3	150	4	mg/L		A2320 B
P-06A	Natural Sample	H14090136-011	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Cadmium, Dissolved	0.00104	0.00003	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Calcium, Dissolved	65	1	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Chloride	73	1	mg/L		E300.0
P-06A	Natural Sample	H14090136-011	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Copper, Dissolved	0.061	0.001	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Hardness as CaCO3	217	1	mg/L		A2340 B
P-06A	Natural Sample	H14090136-011	9/3/2014	Iron, Dissolved	0.22	0.02	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Lead, Dissolved	0.0019	0.0003	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Magnesium, Dissolved	13	1	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Manganese, Dissolved	0.197	0.001	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Mercury, Dissolved	0.000062	0.000005	mg/L		E245.1
P-06A	Natural Sample	H14090136-011	9/3/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Potassium, Dissolved	5	1	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Sodium, Dissolved	78	1	mg/L		E200.7
P-06A	Natural Sample	H14090136-011	9/3/2014	Sulfate	180	1	mg/L		E300.0
P-06A	Natural Sample	H14090136-011	9/3/2014	Uranium, Dissolved	0.006	0.0002	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
P-06A	Natural Sample	H14090136-011	9/3/2014	Zinc, Dissolved	0.226	0.008	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Alkalinity, Total as CaCO3	200	4	mg/L		A2320 B
P-114	Natural Sample	H14090136-034	9/4/2014	Aluminum, Dissolved	0.289	0.009	mg/L	J	E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Barium, Dissolved	0.019	0.003	mg/L		E200.8

P-114	Natural Sample	H14090136-034	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Bicarbonate Alkalinity as HCO3	240	4	mg/L		A2320 B
P-114	Natural Sample	H14090136-034	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Calcium, Dissolved	55	1	mg/L		E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Chloride	30	1	mg/L		E300.0
P-114	Natural Sample	H14090136-034	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Hardness as CaCO3	160	1	mg/L		A2340 B
P-114	Natural Sample	H14090136-034	9/4/2014	Iron, Dissolved	0.11	0.02	mg/L		E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Magnesium, Dissolved	6	1	mg/L		E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Manganese, Dissolved	0.004	0.001	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Mercury, Dissolved	0.000088	0.000005	mg/L		E245.1
P-114	Natural Sample	H14090136-034	9/4/2014	Molybdenum, Dissolved	0.006	0.005	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Potassium, Dissolved	4	1	mg/L		E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Sodium, Dissolved	97	1	mg/L		E200.7
P-114	Natural Sample	H14090136-034	9/4/2014	Sulfate	110	1	mg/L		E300.0
P-114	Natural Sample	H14090136-034	9/4/2014	Uranium, Dissolved	0.0026	0.0002	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
P-114	Natural Sample	H14090136-034	9/4/2014	Zinc, Dissolved	0.01	0.008	mg/L	B	E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Alkalinity, Total as CaCO3	180	4	mg/L		A2320 B
P-37A	Natural Sample	H14090136-025	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
P-37A	Natural Sample	H14090136-025	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Barium, Dissolved	0.031	0.003	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Bicarbonate Alkalinity as HCO3	220	4	mg/L		A2320 B
P-37A	Natural Sample	H14090136-025	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
P-37A	Natural Sample	H14090136-025	9/4/2014	Cadmium, Dissolved	0.00589	0.00003	mg/L	J	E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Calcium, Dissolved	105	1	mg/L		E200.7

P-37A	Natural Sample	H14090136-025	9/4/2014	Chloride	93	1	mg/L		E300.0
P-37A	Natural Sample	H14090136-025	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Copper, Dissolved	0.025	0.001	mg/L	J	E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Hardness as CaCO3	342	1	mg/L		A2340 B
P-37A	Natural Sample	H14090136-025	9/4/2014	Iron, Dissolved	0.09	0.02	mg/L		E200.7
P-37A	Natural Sample	H14090136-025	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Magnesium, Dissolved	19	1	mg/L		E200.7
P-37A	Natural Sample	H14090136-025	9/4/2014	Manganese, Dissolved	2.67	0.001	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Mercury, Dissolved	0.000076	0.000005	mg/L		E245.1
P-37A	Natural Sample	H14090136-025	9/4/2014	Molybdenum, Dissolved	0.008	0.005	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Nickel, Dissolved	0.001	0.002	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Potassium, Dissolved	7	1	mg/L		E200.7
P-37A	Natural Sample	H14090136-025	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Sodium, Dissolved	62	1	mg/L		E200.7
P-37A	Natural Sample	H14090136-025	9/4/2014	Sulfate	200	1	mg/L		E300.0
P-37A	Natural Sample	H14090136-025	9/4/2014	Uranium, Dissolved	0.0059	0.0002	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
P-37A	Natural Sample	H14090136-025	9/4/2014	Zinc, Dissolved	0.269	0.008	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Alkalinity, Total as CaCO3	310	4	mg/L		A2320 B
P-39R	Field Duplicate	H14090136-030	9/4/2014	Alkalinity, Total as CaCO3	310	4	mg/L		A2320 B
P-39R	Natural Sample	H14090136-024	9/4/2014	Aluminum, Dissolved	0.068	0.009	mg/L	J	E200.7
P-39R	Field Duplicate	H14090136-030	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Arsenic, Dissolved	0.011	0.001	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Arsenic, Dissolved	0.011	0.001	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Barium, Dissolved	0.136	0.003	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Barium, Dissolved	0.134	0.003	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Bicarbonate Alkalinity as HCO3	370	4	mg/L		A2320 B
P-39R	Field Duplicate	H14090136-030	9/4/2014	Bicarbonate Alkalinity as HCO3	370	4	mg/L		A2320 B
P-39R	Natural Sample	H14090136-024	9/4/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7

P-39R	Field Duplicate	H14090136-030	9/4/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Cadmium, Dissolved	0.00022	0.00003	mg/L	J	E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Calcium, Dissolved	169	1	mg/L		E200.7
P-39R	Field Duplicate	H14090136-030	9/4/2014	Calcium, Dissolved	174	1	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Chloride	140	1	mg/L		E300.0
P-39R	Field Duplicate	H14090136-030	9/4/2014	Chloride	140	1	mg/L		E300.0
P-39R	Natural Sample	H14090136-024	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Copper, Dissolved	0.043	0.001	mg/L	J	E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Copper, Dissolved	0.033	0.001	mg/L	J	E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Hardness as CaCO3	542	1	mg/L		A2340 B
P-39R	Field Duplicate	H14090136-030	9/4/2014	Hardness as CaCO3	555	1	mg/L		A2340 B
P-39R	Natural Sample	H14090136-024	9/4/2014	Iron, Dissolved	0.06	0.02	mg/L		E200.7
P-39R	Field Duplicate	H14090136-030	9/4/2014	Iron, Dissolved	0.02	0.02	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Magnesium, Dissolved	29	1	mg/L		E200.7
P-39R	Field Duplicate	H14090136-030	9/4/2014	Magnesium, Dissolved	30	1	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Manganese, Dissolved	0.004	0.001	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Manganese, Dissolved	0.002	0.001	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
P-39R	Field Duplicate	H14090136-030	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
P-39R	Natural Sample	H14090136-024	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Nickel, Dissolved	0.002	0.002	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Nickel, Dissolved	0.003	0.002	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Potassium, Dissolved	13	1	mg/L		E200.7
P-39R	Field Duplicate	H14090136-030	9/4/2014	Potassium, Dissolved	14	1	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Selenium, Dissolved	0.002	0.001	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

P-39R	Natural Sample	H14090136-024	9/4/2014	Sodium, Dissolved	91	1	mg/L		E200.7
P-39R	Field Duplicate	H14090136-030	9/4/2014	Sodium, Dissolved	95	1	mg/L		E200.7
P-39R	Natural Sample	H14090136-024	9/4/2014	Sulfate	260	1	mg/L		E300.0
P-39R	Field Duplicate	H14090136-030	9/4/2014	Sulfate	260	1	mg/L		E300.0
P-39R	Natural Sample	H14090136-024	9/4/2014	Uranium, Dissolved	0.033	0.0002	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Uranium, Dissolved	0.0323	0.0002	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
P-39R	Natural Sample	H14090136-024	9/4/2014	Zinc, Dissolved	0.022	0.008	mg/L	B	E200.8
P-39R	Field Duplicate	H14090136-030	9/4/2014	Zinc, Dissolved	0.019	0.008	mg/L	B	E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Alkalinity, Total as CaCO3	40	4	mg/L		A2320 B
P-58A	Natural Sample	H14090136-036	9/4/2014	Aluminum, Dissolved	0.299	0.009	mg/L	J	E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Barium, Dissolved	0.04	0.003	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Bicarbonate Alkalinity as HCO3	48	4	mg/L		A2320 B
P-58A	Natural Sample	H14090136-036	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Cadmium, Dissolved	0.0022	0.00003	mg/L	J	E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Calcium, Dissolved	50	1	mg/L		E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Chloride	31	1	mg/L		E300.0
P-58A	Natural Sample	H14090136-036	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Cobalt, Dissolved	0.02	0.01	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Copper, Dissolved	0.041	0.001	mg/L	J	E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Hardness as CaCO3	163	1	mg/L		A2340 B
P-58A	Natural Sample	H14090136-036	9/4/2014	Iron, Dissolved	10.3	0.02	mg/L		E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Lead, Dissolved	0.0004	0.0003	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Magnesium, Dissolved	9	1	mg/L		E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Manganese, Dissolved	7.36	0.001	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
P-58A	Natural Sample	H14090136-036	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Nickel, Dissolved	0.005	0.002	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Potassium, Dissolved	7	1	mg/L		E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

P-58A	Natural Sample	H14090136-036	9/4/2014	Sodium, Dissolved	26	1	mg/L		E200.7
P-58A	Natural Sample	H14090136-036	9/4/2014	Sulfate	190	1	mg/L		E300.0
P-58A	Natural Sample	H14090136-036	9/4/2014	Uranium, Dissolved	0.0005	0.0002	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
P-58A	Natural Sample	H14090136-036	9/4/2014	Zinc, Dissolved	3.07	0.008	mg/L	B	E200.8
	Field Blank	H14060159-016	6/4/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
	Field Blank	H14090136-013	9/4/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
	Field Blank	H14090136-032	9/4/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
	Field Blank	H14090136-021	9/5/2014	Alkalinity, Total as CaCO3	ND	4	mg/L		A2320 B
	Field Blank	H14060159-016	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
	Field Blank	H14090136-032	9/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Arsenic, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Barium, Dissolved	ND	0.003	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
	Field Blank	H14090136-013	9/4/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
	Field Blank	H14090136-032	9/4/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
	Field Blank	H14090136-021	9/5/2014	Bicarbonate Alkalinity as HCO3	ND	4	mg/L		A2320 B
	Field Blank	H14060159-016	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7

	Field Blank	H14090136-032	9/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Calcium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Calcium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-032	9/4/2014	Calcium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Calcium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Chloride	ND	1	mg/L		E300.0
	Field Blank	H14090136-013	9/4/2014	Chloride	ND	1	mg/L		E300.0
	Field Blank	H14090136-032	9/4/2014	Chloride	ND	1	mg/L		E300.0
	Field Blank	H14090136-021	9/5/2014	Chloride	ND	1	mg/L		E300.0
	Field Blank	H14060159-016	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
	Field Blank	H14090136-013	9/4/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
	Field Blank	H14090136-032	9/4/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
	Field Blank	H14090136-021	9/5/2014	Hardness as CaCO3	ND	1	mg/L		A2340 B
	Field Blank	H14060159-016	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
	Field Blank	H14090136-032	9/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8

	Field Blank	H14090136-013	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Magnesium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Magnesium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-032	9/4/2014	Magnesium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Magnesium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
	Field Blank	H14090136-013	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
	Field Blank	H14090136-032	9/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
	Field Blank	H14090136-021	9/5/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
	Field Blank	H14060159-016	6/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Potassium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Potassium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-032	9/4/2014	Potassium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Potassium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

	Field Blank	H14060159-016	6/4/2014	Sodium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-013	9/4/2014	Sodium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-032	9/4/2014	Sodium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14090136-021	9/5/2014	Sodium, Dissolved	ND	1	mg/L		E200.7
	Field Blank	H14060159-016	6/4/2014	Sulfate	ND	1	mg/L		E300.0
	Field Blank	H14090136-013	9/4/2014	Sulfate	ND	1	mg/L		E300.0
	Field Blank	H14090136-032	9/4/2014	Sulfate	ND	1	mg/L		E300.0
	Field Blank	H14090136-021	9/5/2014	Sulfate	ND	1	mg/L		E300.0
	Field Blank	H14060159-016	6/4/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Uranium, Dissolved	ND	0.0002	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
	Field Blank	H14090136-032	9/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
	Field Blank	H14090136-021	9/5/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
	Field Blank	H14060159-016	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
	Field Blank	H14090136-013	9/4/2014	Zinc, Dissolved	ND	0.008	mg/L	B	E200.8
	Field Blank	H14090136-032	9/4/2014	Zinc, Dissolved	0.01	0.008	mg/L	B	E200.8
	Field Blank	H14090136-021	9/5/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8

APPENDIX F

VADOSE ZONE WATER DATA

APPENDIX F
VADOSE ZONE WATER DATA

Table F1. Vadose zone water monitoring data from Streamside Tailings Operable Unit, 2014.

Site	Type	Lab ID	Collected Date	Parameter	Results	RL	Units	Qualifier	Method
LYS-01	Natural Sample	H14060159-005	6/4/2014	Alkalinity, Total as CaCO3	140	4	mg/L		A2320 B
LYS-01	Natural Sample	H14090136-012	9/3/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-01	Natural Sample	H14060159-005	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Barium, Dissolved	0.034	0.003	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Barium, Dissolved	0.039	0.003	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Bicarbonate Alkalinity as HCO3	170	4	mg/L		A2320 B
LYS-01	Natural Sample	H14090136-012	9/3/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-01	Natural Sample	H14060159-005	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Calcium, Dissolved	87	1	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Calcium, Dissolved	101	1	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Chloride	24	1	mg/L		E300.0
LYS-01	Natural Sample	H14090136-012	9/3/2014	Chloride	27	1	mg/L		E300.0
LYS-01	Natural Sample	H14060159-005	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8

LYS-01	Natural Sample	H14090136-012	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Copper, Dissolved	ND	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Hardness as CaCO3	294	1	mg/L		A2340 B
LYS-01	Natural Sample	H14090136-012	9/3/2014	Hardness as CaCO3	341	1	mg/L		A2340 B
LYS-01	Natural Sample	H14060159-005	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Magnesium, Dissolved	19	1	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Magnesium, Dissolved	21	1	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-01	Natural Sample	H14090136-012	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-01	Natural Sample	H14060159-005	6/4/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Potassium, Dissolved	3	1	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Selenium, Dissolved	0.005	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Selenium, Dissolved	0.005	0.001	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Sodium, Dissolved	32	1	mg/L		E200.7
LYS-01	Natural Sample	H14090136-012	9/3/2014	Sodium, Dissolved	38	1	mg/L		E200.7
LYS-01	Natural Sample	H14060159-005	6/4/2014	Sulfate	220	1	mg/L		E300.0
LYS-01	Natural Sample	H14090136-012	9/3/2014	Sulfate	230	1	mg/L		E300.0
LYS-01	Natural Sample	H14060159-005	6/4/2014	Uranium, Dissolved	0.0706	0.0002	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Uranium, Dissolved	0.109	0.0002	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-01	Natural Sample	H14060159-005	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
LYS-01	Natural Sample	H14090136-012	9/3/2014	Zinc, Dissolved	0.011	0.008	mg/L	B	E200.8

LYS-02	Natural Sample	H14060159-007	6/4/2014	Alkalinity, Total as CaCO3	560	4	mg/L		A2320 B
LYS-02	Natural Sample	H14090136-046	9/3/2014	Alkalinity, Total as CaCO3	750	4	mg/L		A2320 B
LYS-02	Natural Sample	H14060159-007	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-02	Natural Sample	H14090136-046	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Antimony, Dissolved	0.0007	0.0009	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Antimony, Dissolved	0.0007	0.0009	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Arsenic, Dissolved	0.031	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Arsenic, Dissolved	0.032	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Barium, Dissolved	0.011	0.003	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Barium, Dissolved	0.015	0.003	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Bicarbonate Alkalinity as HCO3	680	4	mg/L		A2320 B
LYS-02	Natural Sample	H14090136-046	9/3/2014	Bicarbonate Alkalinity as HCO3	910	4	mg/L		A2320 B
LYS-02	Natural Sample	H14060159-007	6/4/2014	Boron, Dissolved	0.6	0.1	mg/L		E200.7
LYS-02	Natural Sample	H14090136-046	9/3/2014	Boron, Dissolved	0.7	0.1	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Cadmium, Dissolved	0.00006	0.00003	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Calcium, Dissolved	370	1	mg/L		E200.7
LYS-02	Natural Sample	H14090136-046	9/3/2014	Calcium, Dissolved	447	1	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Chloride	36	1	mg/L		E300.0
LYS-02	Natural Sample	H14090136-046	9/3/2014	Chloride	96	1	mg/L		E300.0
LYS-02	Natural Sample	H14060159-007	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Copper, Dissolved	0.009	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Copper, Dissolved	0.01	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Hardness as CaCO3	1720	1	mg/L		A2340 B
LYS-02	Natural Sample	H14090136-046	9/3/2014	Hardness as CaCO3	2160	1	mg/L		A2340 B
LYS-02	Natural Sample	H14060159-007	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-02	Natural Sample	H14090136-046	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Magnesium, Dissolved	193	1	mg/L		E200.7

LYS-02	Natural Sample	H14090136-046	9/3/2014	Magnesium, Dissolved	254	1	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1
LYS-02	Natural Sample	H14090136-046	9/3/2014	Mercury, Dissolved	0.000007	0.000005	mg/L		E245.1
LYS-02	Natural Sample	H14060159-007	6/4/2014	Molybdenum, Dissolved	0.054	0.005	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Molybdenum, Dissolved	0.06	0.005	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Potassium, Dissolved	3	1	mg/L		E200.7
LYS-02	Natural Sample	H14090136-046	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Selenium, Dissolved	0.014	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Selenium, Dissolved	0.028	0.001	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Sodium, Dissolved	2380	1	mg/L		E200.7
LYS-02	Natural Sample	H14090136-046	9/3/2014	Sodium, Dissolved	2940	1	mg/L		E200.7
LYS-02	Natural Sample	H14060159-007	6/4/2014	Sulfate	8300	1	mg/L		E300.0
LYS-02	Natural Sample	H14090136-046	9/3/2014	Sulfate	8800	1	mg/L		E300.0
LYS-02	Natural Sample	H14060159-007	6/4/2014	Uranium, Dissolved	0.792	0.0002	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Uranium, Dissolved	1.08	0.0002	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-02	Natural Sample	H14060159-007	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8
LYS-02	Natural Sample	H14090136-046	9/3/2014	Zinc, Dissolved	0.014	0.008	mg/L	B	E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-03	Natural Sample	H14090136-016	9/3/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-03	Natural Sample	H14060159-002	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-03	Natural Sample	H14090136-016	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Antimony, Dissolved	0.001	0.0009	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Antimony, Dissolved	0.0007	0.0009	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Arsenic, Dissolved	0.071	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Arsenic, Dissolved	0.083	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Barium, Dissolved	0.039	0.003	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Barium, Dissolved	0.037	0.003	mg/L		E200.8

LYS-03	Natural Sample	H14060159-002	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-03	Natural Sample	H14090136-016	9/3/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-03	Natural Sample	H14060159-002	6/4/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
LYS-03	Natural Sample	H14090136-016	9/3/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Calcium, Dissolved	43	1	mg/L		E200.7
LYS-03	Natural Sample	H14090136-016	9/3/2014	Calcium, Dissolved	42	1	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Chloride		1	mg/L		E300.0
LYS-03	Natural Sample	H14090136-016	9/3/2014	Chloride	4	1	mg/L		E300.0
LYS-03	Natural Sample	H14060159-002	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Copper, Dissolved	0.002	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Hardness as CaCO3	145	1	mg/L		A2340 B
LYS-03	Natural Sample	H14090136-016	9/3/2014	Hardness as CaCO3	139	1	mg/L		A2340 B
LYS-03	Natural Sample	H14060159-002	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-03	Natural Sample	H14090136-016	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Magnesium, Dissolved	9	1	mg/L		E200.7
LYS-03	Natural Sample	H14090136-016	9/3/2014	Magnesium, Dissolved	8	1	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Manganese, Dissolved	0.001	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-03	Natural Sample	H14090136-016	9/3/2014	Mercury, Dissolved	0.000005	0.000005	mg/L		E245.1
LYS-03	Natural Sample	H14060159-002	6/4/2014	Molybdenum, Dissolved	0.022	0.005	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Molybdenum, Dissolved	0.022	0.005	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Potassium, Dissolved	4	1	mg/L		E200.7

LYS-03	Natural Sample	H14090136-016	9/3/2014	Potassium, Dissolved	3	1	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Selenium, Dissolved	ND	0.001	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Sodium, Dissolved	49	1	mg/L		E200.7
LYS-03	Natural Sample	H14090136-016	9/3/2014	Sodium, Dissolved	47	1	mg/L		E200.7
LYS-03	Natural Sample	H14060159-002	6/4/2014	Sulfate		1	mg/L		E300.0
LYS-03	Natural Sample	H14090136-016	9/3/2014	Sulfate	100	1	mg/L		E300.0
LYS-03	Natural Sample	H14060159-002	6/4/2014	Uranium, Dissolved	0.0018	0.0002	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Uranium, Dissolved	0.0017	0.0002	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-03	Natural Sample	H14060159-002	6/4/2014	Zinc, Dissolved	0.033	0.008	mg/L		E200.8
LYS-03	Natural Sample	H14090136-016	9/3/2014	Zinc, Dissolved	0.01	0.008	mg/L	B	E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-04	Natural Sample	H14090136-001	9/3/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-04	Natural Sample	H14060159-010	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-04	Natural Sample	H14060159-010	6/4/2014	Antimony, Dissolved	0.0013	0.0009	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Antimony, Dissolved	0.0015	0.0009	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Arsenic, Dissolved	0.079	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Arsenic, Dissolved	0.07	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Barium, Dissolved	0.056	0.003	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Barium, Dissolved	0.057	0.003	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-04	Natural Sample	H14090136-001	9/3/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-04	Natural Sample	H14060159-010	6/4/2014	Boron, Dissolved	ND	0.1	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
LYS-04	Natural Sample	H14060159-010	6/4/2014	Cadmium, Dissolved	0.00004	0.00003	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Cadmium, Dissolved	0.00004	0.00003	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Calcium, Dissolved	98	1	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Calcium, Dissolved	103	1	mg/L		E200.7

LYS-04	Natural Sample	H14060159-010	6/4/2014	Chloride		1	mg/L		E300.0
LYS-04	Natural Sample	H14090136-001	9/3/2014	Chloride	4	1	mg/L		E300.0
LYS-04	Natural Sample	H14060159-010	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Copper, Dissolved	0.008	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Hardness as CaCO3	384	1	mg/L		A2340 B
LYS-04	Natural Sample	H14090136-001	9/3/2014	Hardness as CaCO3	398	1	mg/L		A2340 B
LYS-04	Natural Sample	H14060159-010	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-04	Natural Sample	H14060159-010	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Magnesium, Dissolved	34	1	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Magnesium, Dissolved	34	1	mg/L		E200.7
LYS-04	Natural Sample	H14060159-010	6/4/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-04	Natural Sample	H14090136-001	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-04	Natural Sample	H14060159-010	6/4/2014	Molybdenum, Dissolved	0.005	0.005	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Molybdenum, Dissolved	ND	0.005	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Potassium, Dissolved	12	1	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Potassium, Dissolved	13	1	mg/L		E200.7
LYS-04	Natural Sample	H14060159-010	6/4/2014	Selenium, Dissolved	0.003	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Selenium, Dissolved	0.003	0.001	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Sodium, Dissolved	150	1	mg/L		E200.7
LYS-04	Natural Sample	H14090136-001	9/3/2014	Sodium, Dissolved	148	1	mg/L		E200.7
LYS-04	Natural Sample	H14060159-010	6/4/2014	Sulfate		1	mg/L		E300.0
LYS-04	Natural Sample	H14090136-001	9/3/2014	Sulfate	450	1	mg/L		E300.0
LYS-04	Natural Sample	H14060159-010	6/4/2014	Uranium, Dissolved	0.0247	0.0002	mg/L		E200.8

LYS-04	Natural Sample	H14090136-001	9/3/2014	Uranium, Dissolved	0.0223	0.0002	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-04	Natural Sample	H14060159-010	6/4/2014	Zinc, Dissolved	0.009	0.008	mg/L		E200.8
LYS-04	Natural Sample	H14090136-001	9/3/2014	Zinc, Dissolved	0.01	0.008	mg/L	B	E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-05	Natural Sample	H14090136-006	9/3/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-05	Natural Sample	H14060159-009	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Antimony, Dissolved	0.0016	0.0009	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Antimony, Dissolved	0.0013	0.0009	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Arsenic, Dissolved	0.018	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Arsenic, Dissolved	0.018	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Barium, Dissolved	0.015	0.003	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Barium, Dissolved	0.014	0.003	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-05	Natural Sample	H14090136-006	9/3/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-05	Natural Sample	H14060159-009	6/4/2014	Boron, Dissolved	2	0.1	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Boron, Dissolved	2.1	0.1	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Cadmium, Dissolved	0.00015	0.00003	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Cadmium, Dissolved	0.00017	0.00003	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Calcium, Dissolved	460	1	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Calcium, Dissolved	447	1	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Chloride		1	mg/L		E300.0
LYS-05	Natural Sample	H14090136-006	9/3/2014	Chloride	5	1	mg/L		E300.0
LYS-05	Natural Sample	H14060159-009	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Copper, Dissolved	0.011	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Hardness as CaCO3	1720	1	mg/L		A2340 B
LYS-05	Natural Sample	H14090136-006	9/3/2014	Hardness as CaCO3	1660	1	mg/L		A2340 B

LYS-05	Natural Sample	H14060159-009	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Magnesium, Dissolved	139	1	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Magnesium, Dissolved	132	1	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Manganese, Dissolved	0.001	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Manganese, Dissolved	0.002	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Mercury, Dissolved	0.000008	0.000005	mg/L		E245.1
LYS-05	Natural Sample	H14090136-006	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-05	Natural Sample	H14060159-009	6/4/2014	Molybdenum, Dissolved	0.029	0.005	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Molybdenum, Dissolved	0.026	0.005	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Potassium, Dissolved	22	1	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Potassium, Dissolved	21	1	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Selenium, Dissolved	0.01	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Selenium, Dissolved	0.009	0.001	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Sodium, Dissolved	1150	1	mg/L		E200.7
LYS-05	Natural Sample	H14090136-006	9/3/2014	Sodium, Dissolved	1070	1	mg/L		E200.7
LYS-05	Natural Sample	H14060159-009	6/4/2014	Sulfate		1	mg/L		E300.0
LYS-05	Natural Sample	H14090136-006	9/3/2014	Sulfate	4500	1	mg/L		E300.0
LYS-05	Natural Sample	H14060159-009	6/4/2014	Uranium, Dissolved	1.89	0.0002	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Uranium, Dissolved	1.67	0.0002	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-05	Natural Sample	H14060159-009	6/4/2014	Zinc, Dissolved	0.013	0.008	mg/L		E200.8
LYS-05	Natural Sample	H14090136-006	9/3/2014	Zinc, Dissolved	0.012	0.008	mg/L	B	E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Alkalinity, Total as CaCO3	45	4	mg/L		A2320 B
LYS-06	Natural Sample	H14090136-007	9/3/2014	Alkalinity, Total as CaCO3	73	4	mg/L		A2320 B
LYS-06	Natural Sample	H14060159-004	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8

LYS-06	Natural Sample	H14090136-007	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Arsenic, Dissolved	0.002	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Arsenic, Dissolved	0.003	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Barium, Dissolved	0.009	0.003	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Barium, Dissolved	0.01	0.003	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Bicarbonate Alkalinity as HCO3	54	4	mg/L		A2320 B
LYS-06	Natural Sample	H14090136-007	9/3/2014	Bicarbonate Alkalinity as HCO3	88	4	mg/L		A2320 B
LYS-06	Natural Sample	H14060159-004	6/4/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Boron, Dissolved	0.3	0.1	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Calcium, Dissolved	344	1	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Calcium, Dissolved	258	1	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Chloride	28	1	mg/L		E300.0
LYS-06	Natural Sample	H14090136-007	9/3/2014	Chloride	61	1	mg/L		E300.0
LYS-06	Natural Sample	H14060159-004	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Copper, Dissolved	0.012	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Hardness as CaCO3	1090	1	mg/L		A2340 B
LYS-06	Natural Sample	H14090136-007	9/3/2014	Hardness as CaCO3	850	1	mg/L		A2340 B
LYS-06	Natural Sample	H14060159-004	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Magnesium, Dissolved	57	1	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Magnesium, Dissolved	50	1	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Manganese, Dissolved	0.004	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Manganese, Dissolved	0.007	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Mercury, Dissolved	0.000006	0.000005	mg/L		E245.1
LYS-06	Natural Sample	H14090136-007	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1

LYS-06	Natural Sample	H14060159-004	6/4/2014	Molybdenum, Dissolved	0.007	0.005	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Molybdenum, Dissolved	0.011	0.005	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Nickel, Dissolved	0.001	0.002	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Potassium, Dissolved	ND	1	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Potassium, Dissolved	ND	1	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Selenium, Dissolved	0.005	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Selenium, Dissolved	0.004	0.001	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Sodium, Dissolved	241	1	mg/L		E200.7
LYS-06	Natural Sample	H14090136-007	9/3/2014	Sodium, Dissolved	229	1	mg/L		E200.7
LYS-06	Natural Sample	H14060159-004	6/4/2014	Sulfate	1600	1	mg/L		E300.0
LYS-06	Natural Sample	H14090136-007	9/3/2014	Sulfate	1300	1	mg/L		E300.0
LYS-06	Natural Sample	H14060159-004	6/4/2014	Uranium, Dissolved	0.0005	0.0002	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Uranium, Dissolved	0.0066	0.0002	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-06	Natural Sample	H14060159-004	6/4/2014	Zinc, Dissolved	0.014	0.008	mg/L		E200.8
LYS-06	Natural Sample	H14090136-007	9/3/2014	Zinc, Dissolved	0.023	0.008	mg/L	B	E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-07	Natural Sample	H14090136-017	9/3/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-07	Natural Sample	H14060159-006	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-07	Natural Sample	H14090136-017	9/3/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Antimony, Dissolved	0.0014	0.0009	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Arsenic, Dissolved	0.006	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Barium, Dissolved	0.007	0.003	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Barium, Dissolved	0.006	0.003	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-07	Natural Sample	H14090136-017	9/3/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-07	Natural Sample	H14060159-006	6/4/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7

LYS-07	Natural Sample	H14090136-017	9/3/2014	Boron, Dissolved	0.2	0.1	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Cadmium, Dissolved	0.00008	0.00003	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Cadmium, Dissolved	0.00004	0.00003	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Calcium, Dissolved	265	1	mg/L		E200.7
LYS-07	Natural Sample	H14090136-017	9/3/2014	Calcium, Dissolved	316	1	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Chloride		1	mg/L		E300.0
LYS-07	Natural Sample	H14090136-017	9/3/2014	Chloride		1	mg/L		E300.0
LYS-07	Natural Sample	H14060159-006	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Copper, Dissolved	0.006	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Copper, Dissolved	0.004	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Hardness as CaCO3	939	1	mg/L		A2340 B
LYS-07	Natural Sample	H14090136-017	9/3/2014	Hardness as CaCO3	1120	1	mg/L		A2340 B
LYS-07	Natural Sample	H14060159-006	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-07	Natural Sample	H14090136-017	9/3/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Magnesium, Dissolved	67	1	mg/L		E200.7
LYS-07	Natural Sample	H14090136-017	9/3/2014	Magnesium, Dissolved	80	1	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Manganese, Dissolved	0.003	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Manganese, Dissolved	ND	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-07	Natural Sample	H14090136-017	9/3/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-07	Natural Sample	H14060159-006	6/4/2014	Molybdenum, Dissolved	0.123	0.005	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Molybdenum, Dissolved	0.11	0.005	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Potassium, Dissolved	10	1	mg/L		E200.7
LYS-07	Natural Sample	H14090136-017	9/3/2014	Potassium, Dissolved	10	1	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Selenium, Dissolved	0.003	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Selenium, Dissolved	0.003	0.001	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

LYS-07	Natural Sample	H14060159-006	6/4/2014	Sodium, Dissolved	745	1	mg/L		E200.7
LYS-07	Natural Sample	H14090136-017	9/3/2014	Sodium, Dissolved	832	1	mg/L		E200.7
LYS-07	Natural Sample	H14060159-006	6/4/2014	Sulfate		1	mg/L		E300.0
LYS-07	Natural Sample	H14090136-017	9/3/2014	Sulfate		1	mg/L		E300.0
LYS-07	Natural Sample	H14060159-006	6/4/2014	Uranium, Dissolved	0.154	0.0002	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Uranium, Dissolved	0.199	0.0002	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-07	Natural Sample	H14060159-006	6/4/2014	Zinc, Dissolved	0.045	0.008	mg/L		E200.8
LYS-07	Natural Sample	H14090136-017	9/3/2014	Zinc, Dissolved	0.009	0.008	mg/L	B	E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Alkalinity, Total as CaCO3		4	mg/L		A2320 B
LYS-08	Natural Sample	H14060159-001	6/4/2014	Aluminum, Dissolved	ND	0.009	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Antimony, Dissolved	ND	0.0009	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Arsenic, Dissolved	0.005	0.001	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Barium, Dissolved	0.03	0.003	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Beryllium, Dissolved	ND	0.0008	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Bicarbonate Alkalinity as HCO3		4	mg/L		A2320 B
LYS-08	Natural Sample	H14060159-001	6/4/2014	Boron, Dissolved	0.1	0.1	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Cadmium, Dissolved	ND	0.00003	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Calcium, Dissolved	171	1	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Chloride		1	mg/L		E300.0
LYS-08	Natural Sample	H14060159-001	6/4/2014	Chromium, Dissolved	ND	0.01	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Cobalt, Dissolved	ND	0.01	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Copper, Dissolved	0.001	0.001	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Hardness as CaCO3	799	1	mg/L		A2340 B
LYS-08	Natural Sample	H14060159-001	6/4/2014	Iron, Dissolved	ND	0.02	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Lead, Dissolved	ND	0.0003	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Magnesium, Dissolved	90	1	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Manganese, Dissolved	0.005	0.001	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Mercury, Dissolved	ND	0.000005	mg/L		E245.1
LYS-08	Natural Sample	H14060159-001	6/4/2014	Molybdenum, Dissolved	0.008	0.005	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Nickel, Dissolved	ND	0.002	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Potassium, Dissolved	6	1	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Selenium, Dissolved	0.012	0.001	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Silver, Dissolved	ND	0.0002	mg/L		E200.8

LYS-08	Natural Sample	H14060159-001	6/4/2014	Sodium, Dissolved	116	1	mg/L		E200.7
LYS-08	Natural Sample	H14060159-001	6/4/2014	Sulfate		1	mg/L		E300.0
LYS-08	Natural Sample	H14060159-001	6/4/2014	Uranium, Dissolved	0.123	0.0002	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Vanadium, Dissolved	ND	0.1	mg/L		E200.8
LYS-08	Natural Sample	H14060159-001	6/4/2014	Zinc, Dissolved	ND	0.008	mg/L		E200.8

APPENDIX G

MACROINVERTEBRATE DATA

APPENDIX G
MACROINVERTEBRATE DATA

Table G1. Macroinvertebrate monitoring data from Streamside Tailings Operable Unit, 2014. Samples analyzed according to method 10500-C by Rhithron Associates (Missoula, MT). Results represent actual counts of each species as described in Section 5.2.2.

Site	Biological Taxonomic Name	Result	Analysis Start Date	Laboratory Sample ID	Result Comment
SS-01	Amiocentrus aspilus	1	10/24/2014	CC14SBC001	
SS-01	Atractides	1	10/24/2014	CC14SBC001	
SS-01	Baetis tricaudatus	14	10/24/2014	CC14SBC001	Baetis tricaudatus complex
SS-01	Brachycentrus americanus	20	10/24/2014	CC14SBC001	
SS-01	Brillia	1	10/24/2014	CC14SBC001	
SS-01	Chelifera	3	10/24/2014	CC14SBC001	
SS-01	Cricotopus (Cricotopus)	1	10/24/2014	CC14SBC001	
SS-01	Cricotopus bicinctus	3	10/24/2014	CC14SBC001	
SS-01	Cryptochironomus	1	10/24/2014	CC14SBC001	
SS-01	Diamesa	1	10/24/2014	CC14SBC001	
SS-01	Diphetor hageni	1	10/24/2014	CC14SBC001	
SS-01	Gyraulus	1	10/24/2014	CC14SBC001	
SS-01	Lebertia	6	10/24/2014	CC14SBC001	
SS-01	Micrasema	1	10/24/2014	CC14SBC001	
SS-01	Microcylloepus	1	10/24/2014	CC14SBC001	
SS-01	Micropsectra	1	10/24/2014	CC14SBC001	
SS-01	Naididae	11	10/24/2014	CC14SBC001	
SS-01	Nais	27	10/24/2014	CC14SBC001	
SS-01	Narpus concolor	1	10/24/2014	CC14SBC001	
SS-01	Nemata	2	10/24/2014	CC14SBC001	
SS-01	Neoplasta	7	10/24/2014	CC14SBC001	
SS-01	Ophidonais serpentina	12	10/24/2014	CC14SBC001	
SS-01	Optioservus	43	10/24/2014	CC14SBC001	
SS-01	Orthocladiinae	2	10/24/2014	CC14SBC001	
SS-01	Orthocladius	36	10/24/2014	CC14SBC001	
SS-01	Pagastia	3	10/24/2014	CC14SBC001	
SS-01	Parametriocnemus	11	10/24/2014	CC14SBC001	
SS-01	Pisidiidae	4	10/24/2014	CC14SBC001	
SS-01	Procladius	1	10/24/2014	CC14SBC001	
SS-01	Prodiamesa	1	10/24/2014	CC14SBC001	
SS-01	Pseudosmittia	1	10/24/2014	CC14SBC001	Allocladius (Kieffer, 1913)
SS-01	Rheocricotopus	1	10/24/2014	CC14SBC001	
SS-01	Simulium	12	10/24/2014	CC14SBC001	
SS-01	Sperchon	32	10/24/2014	CC14SBC001	
SS-01	Stagnicola	3	10/24/2014	CC14SBC001	
SS-01	Thienemanniella	1	10/24/2014	CC14SBC001	

SS-01	Tipula	4	10/24/2014	CC14SBC001	
SS-01	Tvetenia bavarica	1	10/24/2014	CC14SBC001	Tvetenia Bavarica Group
SS-01	Zaitzevia	2	10/24/2014	CC14SBC001	
SS-05A	Baetidae	3	10/23/2014	CC14SBC002	
SS-05A	Brachycentrus	1	10/23/2014	CC14SBC002	
SS-05A	Cardiocladius	1	10/23/2014	CC14SBC002	
SS-05A	Corynoneura	1	10/23/2014	CC14SBC002	
SS-05A	Cricotopus trifascia	3	10/23/2014	CC14SBC002	
SS-05A	Diamesa	2	10/23/2014	CC14SBC002	
SS-05A	Eukiefferiella brehmi	1	10/23/2014	CC14SBC002	Eukiefferiella Brehmi Group
SS-05A	Haliplus	2	10/23/2014	CC14SBC002	
SS-05A	Hydropsyche	6	10/23/2014	CC14SBC002	
SS-05A	Hygrobates	5	10/23/2014	CC14SBC002	
SS-05A	Lepidostoma	1	10/23/2014	CC14SBC002	
SS-05A	Muscidae	1	10/23/2014	CC14SBC002	
SS-05A	Naididae	2	10/23/2014	CC14SBC002	
SS-05A	Neoplasta	5	10/23/2014	CC14SBC002	
SS-05A	Oecetis	2	10/23/2014	CC14SBC002	
SS-05A	Optioservus	27	10/23/2014	CC14SBC002	
SS-05A	Orthocladiinae	1	10/23/2014	CC14SBC002	
SS-05A	Orthocladius	2	10/23/2014	CC14SBC002	
SS-05A	Pagastia	2	10/23/2014	CC14SBC002	
SS-05A	Physella	1	10/23/2014	CC14SBC002	
SS-05A	Planorbidae	1	10/23/2014	CC14SBC002	
SS-05A	Simulium	152	10/23/2014	CC14SBC002	
SS-05A	Sperchon	78	10/23/2014	CC14SBC002	
SS-05A	Stagnicola	6	10/23/2014	CC14SBC002	
SS-05A	Thienemannimyia	5	10/23/2014	CC14SBC002	Thienemannimyia Group
SS-05A	Trichoptera	1	10/23/2014	CC14SBC002	
SS-05A	Zaitzevia	4	10/23/2014	CC14SBC002	
SS-06G	Baetis tricaudatus	12	10/23/2014	CC14SBC003	Baetis tricaudatus complex
SS-06G	Brachycentrus occidentalis	2	10/23/2014	CC14SBC003	
SS-06G	Cricotopus trifascia	1	10/23/2014	CC14SBC003	
SS-06G	Eukiefferiella brehmi	1	10/23/2014	CC14SBC003	Eukiefferiella Brehmi Group
SS-06G	Eukiefferiella devonica	1	10/23/2014	CC14SBC003	Eukiefferiella Devonica Group
SS-06G	Hydropsyche	131	10/23/2014	CC14SBC003	
SS-06G	Hydropsychidae	1	10/23/2014	CC14SBC003	
SS-06G	Lebertia	5	10/23/2014	CC14SBC003	
SS-06G	Lymnaeidae	5	10/23/2014	CC14SBC003	
SS-06G	Naididae	11	10/23/2014	CC14SBC003	
SS-06G	Neoplasta	3	10/23/2014	CC14SBC003	
SS-06G	Optioservus	85	10/23/2014	CC14SBC003	
SS-06G	Orthocladius	2	10/23/2014	CC14SBC003	
SS-06G	Pagastia	9	10/23/2014	CC14SBC003	
SS-06G	Parametriocnemus	1	10/23/2014	CC14SBC003	
SS-06G	Pisidium	19	10/23/2014	CC14SBC003	
SS-06G	Rhyacodrilus	4	10/23/2014	CC14SBC003	
SS-06G	Sperchon	16	10/23/2014	CC14SBC003	

SS-06G	Stagnicola	6	10/23/2014	CC14SBC003	
SS-06G	Thienemanniella	1	10/23/2014	CC14SBC003	
SS-06G	Thienemannimyia	2	10/23/2014	CC14SBC003	Thienemannimyia Group
SS-06G	Tvetenia bavarica	3	10/23/2014	CC14SBC003	Tvetenia Bavarica Group
SS-06G	Zaitzevia	14	10/23/2014	CC14SBC003	
SS-07	Baetis	4	10/22/2014	CC14SBC004	Baetis Rhodani Gr.
SS-07	Cardiocladius	3	10/22/2014	CC14SBC004	
SS-07	Chironomus	77	10/22/2014	CC14SBC004	
SS-07	Cleptelmis addenda	1	10/22/2014	CC14SBC004	
SS-07	Cricotopus (Cricotopus)	18	10/22/2014	CC14SBC004	
SS-07	Cricotopus bicinctus	7	10/22/2014	CC14SBC004	
SS-07	Cricotopus trifascia	3	10/22/2014	CC14SBC004	
SS-07	Erpobdella	4	10/22/2014	CC14SBC004	
SS-07	Eukiefferiella claripennis	2	10/22/2014	CC14SBC004	Eukiefferiella Claripennis Group
SS-07	Gyraulus	1	10/22/2014	CC14SBC004	
SS-07	Helobdella stagnalis	1	10/22/2014	CC14SBC004	
SS-07	Hydropsyche	9	10/22/2014	CC14SBC004	
SS-07	Hygrobates	5	10/22/2014	CC14SBC004	
SS-07	Lebertia	3	10/22/2014	CC14SBC004	
SS-07	Lumbriculidae	1	10/22/2014	CC14SBC004	
SS-07	Lymnaeidae	1	10/22/2014	CC14SBC004	
SS-07	Micropsectra	1	10/22/2014	CC14SBC004	
SS-07	Naididae	16	10/22/2014	CC14SBC004	
SS-07	Nais	27	10/22/2014	CC14SBC004	
SS-07	Nemata	23	10/22/2014	CC14SBC004	
SS-07	Neoplasta	2	10/22/2014	CC14SBC004	
SS-07	Oecetis	2	10/22/2014	CC14SBC004	
SS-07	Optioservus	25	10/22/2014	CC14SBC004	
SS-07	Orthocladius	2	10/22/2014	CC14SBC004	
SS-07	Pagastia	3	10/22/2014	CC14SBC004	
SS-07	Parametriocnemus	4	10/22/2014	CC14SBC004	
SS-07	Phaenopsectra	6	10/22/2014	CC14SBC004	
SS-07	Pisidium	9	10/22/2014	CC14SBC004	
SS-07	Simulium	26	10/22/2014	CC14SBC004	
SS-07	Sperchon	12	10/22/2014	CC14SBC004	
SS-07	Stagnicola	3	10/22/2014	CC14SBC004	
SS-07	Thienemannimyia	2	10/22/2014	CC14SBC004	Thienemannimyia Group
SS-07	Tipula	2	10/22/2014	CC14SBC004	
SS-07	Trepaxonemata	1	10/22/2014	CC14SBC004	
SS-07	Zaitzevia	1	10/22/2014	CC14SBC004	
SS-08	Cricotopus	1	10/23/2014	CC14SBC005	
SS-08	Cricotopus bicinctus	3	10/23/2014	CC14SBC005	
SS-08	Cricotopus trifascia	3	10/23/2014	CC14SBC005	
SS-08	Enchytraeus	2	10/23/2014	CC14SBC005	
SS-08	Erpobdella	2	10/23/2014	CC14SBC005	
SS-08	Eukiefferiella	2	10/23/2014	CC14SBC005	
SS-08	Eukiefferiella brehmi	7	10/23/2014	CC14SBC005	Eukiefferiella Brehmi Group
SS-08	Eukiefferiella brevicalcar	2	10/23/2014	CC14SBC005	Eukiefferiella Brevicalcar

					Group
SS-08	Eukiefferiella claripennis	3	10/23/2014	CC14SBC005	Eukiefferiella Claripennis Group
SS-08	Helobdella stagnalis	2	10/23/2014	CC14SBC005	
SS-08	Hydrozoa	1	10/23/2014	CC14SBC005	
SS-08	Hygrobates	2	10/23/2014	CC14SBC005	
SS-08	Micropsectra	61	10/23/2014	CC14SBC005	
SS-08	Naididae	61	10/23/2014	CC14SBC005	
SS-08	Nais	45	10/23/2014	CC14SBC005	
SS-08	Nanocladius	1	10/23/2014	CC14SBC005	
SS-08	Nemata	1	10/23/2014	CC14SBC005	
SS-08	Ophidonais serpentina	17	10/23/2014	CC14SBC005	
SS-08	Optioservus	2	10/23/2014	CC14SBC005	
SS-08	Orthocladiinae	11	10/23/2014	CC14SBC005	
SS-08	Orthocladius	2	10/23/2014	CC14SBC005	
SS-08	Parametriocnemus	3	10/23/2014	CC14SBC005	
SS-08	Phaenopsectra	1	10/23/2014	CC14SBC005	
SS-08	Pisidium	2	10/23/2014	CC14SBC005	
SS-08	Simulium	18	10/23/2014	CC14SBC005	
SS-08	Slavina appendiculata	1	10/23/2014	CC14SBC005	
SS-08	Sperchon	5	10/23/2014	CC14SBC005	
SS-08	Tanytarsini	10	10/23/2014	CC14SBC005	
SS-08	Thienemanniella	3	10/23/2014	CC14SBC005	
SS-08	Thienemannimyia	4	10/23/2014	CC14SBC005	Thienemannimyia Group
SS-08	Tvetenia bavarica	4	10/23/2014	CC14SBC005	Tvetenia Bavarica Group
SS-08	Zaitzevia	4	10/23/2014	CC14SBC005	
SS-10A	Baetis	1	10/24/2014	CC14SBC006	Baetis Rhodani Gr.
SS-10A	Cheumatopsyche	50	10/24/2014	CC14SBC006	
SS-10A	Cricotopus bicinctus	1	10/24/2014	CC14SBC006	
SS-10A	Cricotopus trifascia	5	10/24/2014	CC14SBC006	
SS-10A	Cryptochironomus	3	10/24/2014	CC14SBC006	
SS-10A	Enchytraeus	1	10/24/2014	CC14SBC006	
SS-10A	Erpobdella	7	10/24/2014	CC14SBC006	
SS-10A	Eukiefferiella brehmi	2	10/24/2014	CC14SBC006	Eukiefferiella Brehmi Group
SS-10A	Helicopsyche	3	10/24/2014	CC14SBC006	
SS-10A	Helobdella stagnalis	3	10/24/2014	CC14SBC006	
SS-10A	Hydropsyche	1	10/24/2014	CC14SBC006	
SS-10A	Hygrobates	77	10/24/2014	CC14SBC006	
SS-10A	Lebertia	2	10/24/2014	CC14SBC006	
SS-10A	Micropsectra	12	10/24/2014	CC14SBC006	
SS-10A	Microtendipes	2	10/24/2014	CC14SBC006	
SS-10A	Naididae	17	10/24/2014	CC14SBC006	
SS-10A	Nais	1	10/24/2014	CC14SBC006	
SS-10A	Nemata	1	10/24/2014	CC14SBC006	
SS-10A	Neoplasta	1	10/24/2014	CC14SBC006	
SS-10A	Oecetis	27	10/24/2014	CC14SBC006	
SS-10A	Ophidonais serpentina	1	10/24/2014	CC14SBC006	
SS-10A	Optioservus	2	10/24/2014	CC14SBC006	
SS-10A	Orthocladius	3	10/24/2014	CC14SBC006	

SS-10A	Parametriocnemus	5	10/24/2014	CC14SBC006	
SS-10A	Physella	10	10/24/2014	CC14SBC006	
SS-10A	Pisidiidae	3	10/24/2014	CC14SBC006	
SS-10A	Planorbidae	2	10/24/2014	CC14SBC006	
SS-10A	Potthastia longimana	1	10/24/2014	CC14SBC006	Potthastia Longimana Group
SS-10A	Simulium	2	10/24/2014	CC14SBC006	
SS-10A	Sperchon	33	10/24/2014	CC14SBC006	
SS-10A	Stagnicola	1	10/24/2014	CC14SBC006	
SS-10A	Thienemannimyia	26	10/24/2014	CC14SBC006	Thienemannimyia Group
SS-10A	Trepaxonemata	2	10/24/2014	CC14SBC006	
SS-10A	Tvetenia bavarica	1	10/24/2014	CC14SBC006	Tvetenia Bavarica Group
SS-10A	Zaitzevia	4	10/24/2014	CC14SBC006	
SS-10B	Acari	2	10/23/2014	CC14SBC007	
SS-10B	Baetis tricaudatus	1	10/23/2014	CC14SBC007	Baetis tricaudatus complex
SS-10B	Caecidotea	43	10/23/2014	CC14SBC007	
SS-10B	Cheumatopsyche	6	10/23/2014	CC14SBC007	
SS-10B	Chironomini	2	10/23/2014	CC14SBC007	
SS-10B	Copepoda	2	10/23/2014	CC14SBC007	
SS-10B	Cricotopus (Isocladius)	1	10/23/2014	CC14SBC007	
SS-10B	Cricotopus trifascia	4	10/23/2014	CC14SBC007	
SS-10B	Enchytraeus	3	10/23/2014	CC14SBC007	
SS-10B	Erpobdella	13	10/23/2014	CC14SBC007	
SS-10B	Eukiefferiella brehmi	2	10/23/2014	CC14SBC007	Eukiefferiella Brehmi Group
SS-10B	Gyraulus	2	10/23/2014	CC14SBC007	
SS-10B	Haliplus	1	10/23/2014	CC14SBC007	
SS-10B	Helobdella stagnalis	3	10/23/2014	CC14SBC007	
SS-10B	Hydroporinae	2	10/23/2014	CC14SBC007	
SS-10B	Hygrobates	28	10/23/2014	CC14SBC007	
SS-10B	Iswaeon	1	10/23/2014	CC14SBC007	
SS-10B	Lebertia	1	10/23/2014	CC14SBC007	
SS-10B	Lymnaeidae	3	10/23/2014	CC14SBC007	
SS-10B	Micropsectra	5	10/23/2014	CC14SBC007	
SS-10B	Naididae	76	10/23/2014	CC14SBC007	
SS-10B	Nais	1	10/23/2014	CC14SBC007	
SS-10B	Oecetis	19	10/23/2014	CC14SBC007	
SS-10B	Ophidonais serpentina	1	10/23/2014	CC14SBC007	
SS-10B	Orthocladiinae	1	10/23/2014	CC14SBC007	
SS-10B	Orthocladius	7	10/23/2014	CC14SBC007	
SS-10B	Parametriocnemus	1	10/23/2014	CC14SBC007	
SS-10B	Physella	15	10/23/2014	CC14SBC007	
SS-10B	Pisidium	46	10/23/2014	CC14SBC007	
SS-10B	Planorbidae	2	10/23/2014	CC14SBC007	
SS-10B	Simulium	10	10/23/2014	CC14SBC007	
SS-10B	Slavina appendiculata	1	10/23/2014	CC14SBC007	
SS-10B	Sperchon	10	10/23/2014	CC14SBC007	
SS-10B	Stagnicola	1	10/23/2014	CC14SBC007	
SS-10B	Thienemanniella	1	10/23/2014	CC14SBC007	
SS-10B	Thienemannimyia	5	10/23/2014	CC14SBC007	Thienemannimyia Group

SS-10B	Tipula	1	10/23/2014	CC14SBC007	
SS-10B	Zaitzevia	1	10/23/2014	CC14SBC007	
SS-11C	Acari	1	10/22/2014	CC14SBC008	
SS-11C	Brachycentrus occidentalis	8	10/22/2014	CC14SBC008	
SS-11C	Cheumatopsyche	28	10/22/2014	CC14SBC008	
SS-11C	Coenagrionidae	1	10/22/2014	CC14SBC008	
SS-11C	Crambidae	1	10/22/2014	CC14SBC008	
SS-11C	Cricotopus trifascia	9	10/22/2014	CC14SBC008	
SS-11C	Erpobdella	11	10/22/2014	CC14SBC008	
SS-11C	Eukiefferiella brehmi	9	10/22/2014	CC14SBC008	Eukiefferiella Brehmi Group
SS-11C	Helicopsyche	67	10/22/2014	CC14SBC008	
SS-11C	Hydropsyche	44	10/22/2014	CC14SBC008	
SS-11C	Hydroptilidae	2	10/22/2014	CC14SBC008	
SS-11C	Hygrobates	72	10/22/2014	CC14SBC008	
SS-11C	Lymnaeidae	3	10/22/2014	CC14SBC008	
SS-11C	Microtendipes	3	10/22/2014	CC14SBC008	
SS-11C	Naididae	2	10/22/2014	CC14SBC008	
SS-11C	Nemata	3	10/22/2014	CC14SBC008	
SS-11C	Oecetis	6	10/22/2014	CC14SBC008	
SS-11C	Optioservus	6	10/22/2014	CC14SBC008	
SS-11C	Orthocladiinae	2	10/22/2014	CC14SBC008	
SS-11C	Orthocladius	2	10/22/2014	CC14SBC008	
SS-11C	Pagastia	1	10/22/2014	CC14SBC008	
SS-11C	Physella	8	10/22/2014	CC14SBC008	
SS-11C	Simulium	6	10/22/2014	CC14SBC008	
SS-11C	Sperchon	22	10/22/2014	CC14SBC008	
SS-11C	Stagnicola	2	10/22/2014	CC14SBC008	
SS-11C	Thienemannimyia	2	10/22/2014	CC14SBC008	Thienemannimyia Group
SS-11C	Tipula	2	10/22/2014	CC14SBC008	
SS-11C	Tvetenia vitracies	2	10/22/2014	CC14SBC008	
SS-11D	Baetidae	1	10/24/2014	CC14SBC009	
SS-11D	Brachycentrus occidentalis	4	10/24/2014	CC14SBC009	
SS-11D	Caecidotea	14	10/24/2014	CC14SBC009	
SS-11D	Cheumatopsyche	26	10/24/2014	CC14SBC009	
SS-11D	Corixidae	2	10/24/2014	CC14SBC009	
SS-11D	Cricotopus bicinctus	1	10/24/2014	CC14SBC009	
SS-11D	Cryptochironomus	1	10/24/2014	CC14SBC009	
SS-11D	Dytiscidae	1	10/24/2014	CC14SBC009	
SS-11D	Erpobdella	15	10/24/2014	CC14SBC009	
SS-11D	Helicopsyche	57	10/24/2014	CC14SBC009	
SS-11D	Helobdella stagnalis	5	10/24/2014	CC14SBC009	
SS-11D	Hyalella	8	10/24/2014	CC14SBC009	
SS-11D	Hydropsyche	10	10/24/2014	CC14SBC009	
SS-11D	Hydroptila	1	10/24/2014	CC14SBC009	
SS-11D	Hydroptilidae	1	10/24/2014	CC14SBC009	
SS-11D	Hygrobates	25	10/24/2014	CC14SBC009	
SS-11D	Lebertia	2	10/24/2014	CC14SBC009	
SS-11D	Lymnaeidae	3	10/24/2014	CC14SBC009	

SS-11D	Micropsectra	1	10/24/2014	CC14SBC009	
SS-11D	Microtendipes	1	10/24/2014	CC14SBC009	
SS-11D	Naididae	25	10/24/2014	CC14SBC009	
SS-11D	Nanocladius	1	10/24/2014	CC14SBC009	
SS-11D	Nemata	1	10/24/2014	CC14SBC009	
SS-11D	Oecetis	9	10/24/2014	CC14SBC009	
SS-11D	Optioservus	12	10/24/2014	CC14SBC009	
SS-11D	Orthocladiinae	1	10/24/2014	CC14SBC009	
SS-11D	Paratendipes	1	10/24/2014	CC14SBC009	
SS-11D	Phaenopsectra	1	10/24/2014	CC14SBC009	
SS-11D	Physella	11	10/24/2014	CC14SBC009	
SS-11D	Pisidiidae	13	10/24/2014	CC14SBC009	
SS-11D	Planorbidae	9	10/24/2014	CC14SBC009	
SS-11D	Polypedilum	1	10/24/2014	CC14SBC009	
SS-11D	Procladius	1	10/24/2014	CC14SBC009	
SS-11D	Sigara	1	10/24/2014	CC14SBC009	
SS-11D	Simulium	8	10/24/2014	CC14SBC009	
SS-11D	Sperchon	12	10/24/2014	CC14SBC009	
SS-11D	Stagnicola	2	10/24/2014	CC14SBC009	
SS-11D	Thienemannimyia	14	10/24/2014	CC14SBC009	Thienemannimyia Group
SS-11D	Tricorythodes	1	10/24/2014	CC14SBC009	
SS-11D	Zaitzevia	3	10/24/2014	CC14SBC009	
SS-13	Brachycentrus occidentalis	2	10/22/2014	CC14SBC010	
SS-13	Caecidotea	1	10/22/2014	CC14SBC010	
SS-13	Cheumatopsyche	13	10/22/2014	CC14SBC010	
SS-13	Cryptochironomus	3	10/22/2014	CC14SBC010	
SS-13	Enchytraeus	1	10/22/2014	CC14SBC010	
SS-13	Erpobdella	22	10/22/2014	CC14SBC010	
SS-13	Galba	1	10/22/2014	CC14SBC010	
SS-13	Glossiphonia	3	10/22/2014	CC14SBC010	
SS-13	Gomphidae	1	10/22/2014	CC14SBC010	
SS-13	Gyraulus	4	10/22/2014	CC14SBC010	
SS-13	Helicopsyche	121	10/22/2014	CC14SBC010	
SS-13	Hyalella	16	10/22/2014	CC14SBC010	
SS-13	Hydropsyche	9	10/22/2014	CC14SBC010	
SS-13	Hygrobates	27	10/22/2014	CC14SBC010	
SS-13	Lebertia	4	10/22/2014	CC14SBC010	
SS-13	Lepidostoma	1	10/22/2014	CC14SBC010	
SS-13	Limnodrilus	1	10/22/2014	CC14SBC010	
SS-13	Lymnaeidae	1	10/22/2014	CC14SBC010	
SS-13	Micropsectra	5	10/22/2014	CC14SBC010	
SS-13	Microtendipes	12	10/22/2014	CC14SBC010	
SS-13	Naididae	20	10/22/2014	CC14SBC010	
SS-13	Nectopsyche	2	10/22/2014	CC14SBC010	
SS-13	Nemata	2	10/22/2014	CC14SBC010	
SS-13	Oecetis	6	10/22/2014	CC14SBC010	
SS-13	Optioservus	1	10/22/2014	CC14SBC010	
SS-13	Physella	18	10/22/2014	CC14SBC010	

SS-13	Pisidium	7	10/22/2014	CC14SBC010	
SS-13	Simulium	10	10/22/2014	CC14SBC010	
SS-13	Sperchon	3	10/22/2014	CC14SBC010	
SS-13	Thienemannimyia	7	10/22/2014	CC14SBC010	Thienemannimyia Group
SS-14	Brachycentrus occidentalis	12	10/22/2014	CC14SBC011	
SS-14	Cheumatopsyche	30	10/22/2014	CC14SBC011	
SS-14	Erpobdella	10	10/22/2014	CC14SBC011	
SS-14	Eukiefferiella brehmi	2	10/22/2014	CC14SBC011	Eukiefferiella Brehmi Group
SS-14	Helicopsyche	127	10/22/2014	CC14SBC011	
SS-14	Hyalella	1	10/22/2014	CC14SBC011	
SS-14	Hydropsyche	68	10/22/2014	CC14SBC011	
SS-14	Hygrobates	33	10/22/2014	CC14SBC011	
SS-14	Lymnaeidae	1	10/22/2014	CC14SBC011	
SS-14	Micropsectra	3	10/22/2014	CC14SBC011	
SS-14	Microtendipes	3	10/22/2014	CC14SBC011	
SS-14	Naididae	6	10/22/2014	CC14SBC011	
SS-14	Oecetis	1	10/22/2014	CC14SBC011	
SS-14	Physella	10	10/22/2014	CC14SBC011	
SS-14	Planorbidae	2	10/22/2014	CC14SBC011	
SS-14	Simulium	1	10/22/2014	CC14SBC011	
SS-14	Skwala	1	10/22/2014	CC14SBC011	
SS-14	Sperchon	2	10/22/2014	CC14SBC011	
SS-14	Stagnicola	4	10/22/2014	CC14SBC011	
SS-14	Thienemannimyia	2	10/22/2014	CC14SBC011	Thienemannimyia Group
SS-14	Tipula	1	10/22/2014	CC14SBC011	
SS-14	Tvetenia bavarica	2	10/22/2014	CC14SBC011	Tvetenia Bavarica Group
SS-15A	Atherix	7	10/23/2014	CC14SBC012	
SS-15A	Baetis tricaudatus	20	10/23/2014	CC14SBC012	Baetis tricaudatus complex
SS-15A	Brachycentrus occidentalis	16	10/23/2014	CC14SBC012	
SS-15A	Eukiefferiella	1	10/23/2014	CC14SBC012	
SS-15A	Eukiefferiella brehmi	7	10/23/2014	CC14SBC012	Eukiefferiella Brehmi Group
SS-15A	Eukiefferiella claripennis	1	10/23/2014	CC14SBC012	Eukiefferiella Claripennis Group
SS-15A	Gyraulus	3	10/23/2014	CC14SBC012	
SS-15A	Helicopsyche	22	10/23/2014	CC14SBC012	
SS-15A	Hydropsyche	173	10/23/2014	CC14SBC012	
SS-15A	Hygrobates	4	10/23/2014	CC14SBC012	
SS-15A	Lebertia	1	10/23/2014	CC14SBC012	
SS-15A	Lepidostoma	9	10/23/2014	CC14SBC012	
SS-15A	Microtendipes	1	10/23/2014	CC14SBC012	
SS-15A	Naididae	4	10/23/2014	CC14SBC012	
SS-15A	Oecetis	1	10/23/2014	CC14SBC012	
SS-15A	Optioservus	1	10/23/2014	CC14SBC012	
SS-15A	Pagastia	2	10/23/2014	CC14SBC012	
SS-15A	Parametriocnemus	1	10/23/2014	CC14SBC012	
SS-15A	Physella	32	10/23/2014	CC14SBC012	
SS-15A	Simulium	13	10/23/2014	CC14SBC012	
SS-15A	Sperchon	2	10/23/2014	CC14SBC012	
SS-15A	Stagnicola	1	10/23/2014	CC14SBC012	

SS-15A	Thienemanniella	1	10/23/2014	CC14SBC012	
SS-15A	Thienemannimyia	2	10/23/2014	CC14SBC012	Thienemannimyia Group
SS-15B	Amiocentrus aspilus	1	10/23/2014	CC14SBC013	
SS-15B	Atherix	11	10/23/2014	CC14SBC013	
SS-15B	Baetis tricaudatus	9	10/23/2014	CC14SBC013	Baetis tricaudatus complex
SS-15B	Brachycentrus occidentalis	9	10/23/2014	CC14SBC013	
SS-15B	Brillia	1	10/23/2014	CC14SBC013	
SS-15B	Cheumatopsyche	1	10/23/2014	CC14SBC013	
SS-15B	Cinygmula	1	10/23/2014	CC14SBC013	
SS-15B	Drunella grandis	7	10/23/2014	CC14SBC013	
SS-15B	Eukiefferiella brehmi	3	10/23/2014	CC14SBC013	Eukiefferiella Brehmi Group
SS-15B	Eukiefferiella claripennis	1	10/23/2014	CC14SBC013	Eukiefferiella Claripennis Group
SS-15B	Glossosoma	2	10/23/2014	CC14SBC013	
SS-15B	Helicopsyche	8	10/23/2014	CC14SBC013	
SS-15B	Hydropsyche	167	10/23/2014	CC14SBC013	
SS-15B	Lepidostoma	20	10/23/2014	CC14SBC013	
SS-15B	Naididae	7	10/23/2014	CC14SBC013	
SS-15B	Optioservus	27	10/23/2014	CC14SBC013	
SS-15B	Orthocladiinae	1	10/23/2014	CC14SBC013	
SS-15B	Pagastia	2	10/23/2014	CC14SBC013	
SS-15B	Physella	4	10/23/2014	CC14SBC013	
SS-15B	Pteronarcella	1	10/23/2014	CC14SBC013	
SS-15B	Simulium	15	10/23/2014	CC14SBC013	
SS-15B	Sperchon	4	10/23/2014	CC14SBC013	
SS-15B	Tricorythodes	1	10/23/2014	CC14SBC013	
SS-15B	Tvetenia bavarica	1	10/23/2014	CC14SBC013	Tvetenia Bavarica Group
SS-15B	Zaitzevia	2	10/23/2014	CC14SBC013	
SS-15B	Zapada cinctipes	4	10/23/2014	CC14SBC013	
SS-15G	Antocha monticola	1	10/23/2014	CC14SBC014	
SS-15G	Arctopsyche	9	10/23/2014	CC14SBC014	
SS-15G	Atherix	8	10/23/2014	CC14SBC014	
SS-15G	Baetis tricaudatus	64	10/23/2014	CC14SBC014	Baetis tricaudatus complex
SS-15G	Brachycentrus americanus	2	10/23/2014	CC14SBC014	
SS-15G	Brillia	2	10/23/2014	CC14SBC014	
SS-15G	Ceratopogoninae	1	10/23/2014	CC14SBC014	
SS-15G	Cinygmula	23	10/23/2014	CC14SBC014	
SS-15G	Cleptelmis addenda	1	10/23/2014	CC14SBC014	
SS-15G	Dicranota	1	10/23/2014	CC14SBC014	
SS-15G	Drunella doddsii	1	10/23/2014	CC14SBC014	
SS-15G	Drunella grandis	1	10/23/2014	CC14SBC014	
SS-15G	Enchytraeus	4	10/23/2014	CC14SBC014	
SS-15G	Ephemerella excrucians	2	10/23/2014	CC14SBC014	
SS-15G	Eukiefferiella	1	10/23/2014	CC14SBC014	
SS-15G	Eukiefferiella claripennis	4	10/23/2014	CC14SBC014	Eukiefferiella Claripennis Group
SS-15G	Glossosomatidae	1	10/23/2014	CC14SBC014	
SS-15G	Hesperoperla pacifica	27	10/23/2014	CC14SBC014	
SS-15G	Heterlimnius corpulentus	17	10/23/2014	CC14SBC014	

SS-15G	Hexatoma	4	10/23/2014	CC14SBC014	
SS-15G	Hydropsyche	14	10/23/2014	CC14SBC014	
SS-15G	Hydropsychidae	7	10/23/2014	CC14SBC014	
SS-15G	Lepidostoma	11	10/23/2014	CC14SBC014	
SS-15G	Micrasema	2	10/23/2014	CC14SBC014	
SS-15G	Micropsectra	9	10/23/2014	CC14SBC014	
SS-15G	Nemata	2	10/23/2014	CC14SBC014	
SS-15G	Neoplasta	1	10/23/2014	CC14SBC014	
SS-15G	Optioservus	26	10/23/2014	CC14SBC014	
SS-15G	Orthocladius	2	10/23/2014	CC14SBC014	
SS-15G	Ostracoda	1	10/23/2014	CC14SBC014	
SS-15G	Pagastia	1	10/23/2014	CC14SBC014	
SS-15G	Pisidium	1	10/23/2014	CC14SBC014	
SS-15G	Simulium	15	10/23/2014	CC14SBC014	
SS-15G	Sperchonopsis	1	10/23/2014	CC14SBC014	
SS-15G	Sweltsa	1	10/23/2014	CC14SBC014	
SS-15G	Thienemannimyia	2	10/23/2014	CC14SBC014	Thienemannimyia Group
SS-15G	Tvetenia	1	10/23/2014	CC14SBC014	
SS-15G	Tvetenia bavarica	16	10/23/2014	CC14SBC014	Tvetenia Bavarica Group
SS-15G	Zaitzevia	12	10/23/2014	CC14SBC014	
SS-15G	Zapada cinctipes	14	10/23/2014	CC14SBC014	
SS-16B	Baetis tricaudatus	3	10/23/2014	CC14SBC015	Baetis tricaudatus complex
SS-16B	Brachycentrus occidentalis	57	10/23/2014	CC14SBC015	
SS-16B	Ceratopogoninae	1	10/23/2014	CC14SBC015	
SS-16B	Cryptochironomus	1	10/23/2014	CC14SBC015	
SS-16B	Eukiefferiella	1	10/23/2014	CC14SBC015	
SS-16B	Helicopsyche	144	10/23/2014	CC14SBC015	
SS-16B	Hydropsyche	27	10/23/2014	CC14SBC015	
SS-16B	Lepidostoma	43	10/23/2014	CC14SBC015	
SS-16B	Microtendipes	2	10/23/2014	CC14SBC015	
SS-16B	Optioservus	14	10/23/2014	CC14SBC015	
SS-16B	Orthocladiinae	2	10/23/2014	CC14SBC015	
SS-16B	Orthocladius	1	10/23/2014	CC14SBC015	
SS-16B	Pagastia	7	10/23/2014	CC14SBC015	
SS-16B	Physella	2	10/23/2014	CC14SBC015	
SS-16B	Planorbidae	1	10/23/2014	CC14SBC015	
SS-16B	Simulium	11	10/23/2014	CC14SBC015	
SS-16B	Thienemanniella	1	10/23/2014	CC14SBC015	
SS-16B	Thienemannimyia	1	10/23/2014	CC14SBC015	Thienemannimyia Group
SS-17D	Baetis tricaudatus	15	10/23/2014	CC14SBC016	Baetis tricaudatus complex
SS-17D	Brachycentrus occidentalis	76	10/23/2014	CC14SBC016	
SS-17D	Cardiocladius	3	10/23/2014	CC14SBC016	
SS-17D	Elmidae	1	10/23/2014	CC14SBC016	
SS-17D	Eukiefferiella brehmi	5	10/23/2014	CC14SBC016	Eukiefferiella Brehmi Group
SS-17D	Eukiefferiella claripennis	2	10/23/2014	CC14SBC016	Eukiefferiella Claripennis Group
SS-17D	Glossosoma	1	10/23/2014	CC14SBC016	
SS-17D	Helicopsyche	51	10/23/2014	CC14SBC016	
SS-17D	Hexatoma	1	10/23/2014	CC14SBC016	

SS-17D	Hydropsyche	52	10/23/2014	CC14SBC016	
SS-17D	Lepidostoma	5	10/23/2014	CC14SBC016	
SS-17D	Micropsectra	2	10/23/2014	CC14SBC016	
SS-17D	Microtendipes	9	10/23/2014	CC14SBC016	
SS-17D	Naididae	3	10/23/2014	CC14SBC016	
SS-17D	Nais	2	10/23/2014	CC14SBC016	
SS-17D	Orthocladiinae	1	10/23/2014	CC14SBC016	
SS-17D	Pagastia	14	10/23/2014	CC14SBC016	
SS-17D	Parametriocnemus	6	10/23/2014	CC14SBC016	
SS-17D	Physidae	1	10/23/2014	CC14SBC016	
SS-17D	Protoptila	3	10/23/2014	CC14SBC016	
SS-17D	Simulium	67	10/23/2014	CC14SBC016	
SS-17D	Skwala	1	10/23/2014	CC14SBC016	
SS-17D	Thienemannimyia	5	10/23/2014	CC14SBC016	Thienemannimyia Group
SS-17D	Tipulidae	1	10/23/2014	CC14SBC016	
SS-17D	Tvetenia bavarica	1	10/23/2014	CC14SBC016	Tvetenia Bavarica Group
SS-19	Antocha monticola	1	10/23/2014	CC14SBC017	
SS-19	Baetidae	1	10/23/2014	CC14SBC017	
SS-19	Baetis tricaudatus	63	10/23/2014	CC14SBC017	Baetis tricaudatus complex
SS-19	Brachycentrus occidentalis	29	10/23/2014	CC14SBC017	
SS-19	Drunella grandis	1	10/23/2014	CC14SBC017	
SS-19	Ephemerella	1	10/23/2014	CC14SBC017	
SS-19	Eukiefferiella	1	10/23/2014	CC14SBC017	
SS-19	Eukiefferiella claripennis	1	10/23/2014	CC14SBC017	Eukiefferiella Claripennis Group
SS-19	Eukiefferiella devonica	1	10/23/2014	CC14SBC017	Eukiefferiella Devonica Group
SS-19	Glossosoma	1	10/23/2014	CC14SBC017	
SS-19	Helicopsyche	10	10/23/2014	CC14SBC017	
SS-19	Hydropsyche	57	10/23/2014	CC14SBC017	
SS-19	Lepidostoma	20	10/23/2014	CC14SBC017	
SS-19	Microtendipes	36	10/23/2014	CC14SBC017	
SS-19	Naididae	1	10/23/2014	CC14SBC017	
SS-19	Optioservus	3	10/23/2014	CC14SBC017	
SS-19	Orthocladiinae	3	10/23/2014	CC14SBC017	
SS-19	Orthocladius	4	10/23/2014	CC14SBC017	
SS-19	Pagastia	12	10/23/2014	CC14SBC017	
SS-19	Parametriocnemus	6	10/23/2014	CC14SBC017	
SS-19	Phaenopsectra	1	10/23/2014	CC14SBC017	
SS-19	Physella	4	10/23/2014	CC14SBC017	
SS-19	Pristina	1	10/23/2014	CC14SBC017	
SS-19	Protoptila	1	10/23/2014	CC14SBC017	
SS-19	Simulium	39	10/23/2014	CC14SBC017	
SS-19	Skwala	2	10/23/2014	CC14SBC017	
SS-19	Sperchon	1	10/23/2014	CC14SBC017	
SS-19	Tvetenia	1	10/23/2014	CC14SBC017	
SS-19	Tvetenia bavarica	11	10/23/2014	CC14SBC017	Tvetenia Bavarica Group

APPENDIX H

PERIPHYTON DATA

APPENDIX H
PERIPHYTON DATA

Table H1. Periphyton monitoring data from Streamside Tailings Operable Unit, 2014. Samples analyzed according to method 10300-C by Rhithron Associates (Missoula, MT). Results represent actual counts of each species as described in Section 5.2.2.

Site	Biological Taxonomic Name	Biological Unidentified Species Name	Result	Analysis Start Date	Laboratory Sample ID
SS-01	Achnanthidium minutissimum		7	10/25/2014	CC14SBCP001
SS-01	Amphora inariensis		8	10/25/2014	CC14SBCP001
SS-01	Amphora ovalis var. pediculus		14	10/25/2014	CC14SBCP001
SS-01	Cocconeis pediculus		3	10/25/2014	CC14SBCP001
SS-01	Cocconeis placentula var. lineata		5	10/25/2014	CC14SBCP001
SS-01	Cyclotella meneghiniana		13	10/25/2014	CC14SBCP001
SS-01	Diatoma vulgare		41	10/25/2014	CC14SBCP001
SS-01	Encyonema prostratum		6	10/25/2014	CC14SBCP001
SS-01	Encyonema silesiacum		17	10/25/2014	CC14SBCP001
SS-01	Fragilaria capucina var. gracilis		4	10/25/2014	CC14SBCP001
SS-01	Fragilaria vaucheriae		50	10/25/2014	CC14SBCP001
SS-01	Geissleria acceptata		2	10/25/2014	CC14SBCP001
SS-01	Geissleria decussis		2	10/25/2014	CC14SBCP001
SS-01	Gomphonema	Gomphonema kobayasii (2)	10	10/25/2014	CC14SBCP001
SS-01	Gomphonema minutum		10	10/25/2014	CC14SBCP001
SS-01	Gomphonema parvulum		6	10/25/2014	CC14SBCP001
SS-01	Mayamaea atomus		4	10/25/2014	CC14SBCP001
SS-01	Melosira varians		42	10/25/2014	CC14SBCP001
SS-01	Meridion circulare var. constrictum		4	10/25/2014	CC14SBCP001
SS-01	Navicula	Navicula cryptotenelloides (2)	4	10/25/2014	CC14SBCP001
SS-01	Navicula caterva		1	10/25/2014	CC14SBCP001
SS-01	Navicula cryptocephala		2	10/25/2014	CC14SBCP001
SS-01	Navicula cryptotenella		2	10/25/2014	CC14SBCP001
SS-01	Navicula lanceolata		1	10/25/2014	CC14SBCP001
SS-01	Navicula minima		36	10/25/2014	CC14SBCP001
SS-01	Navicula subminuscula		3	10/25/2014	CC14SBCP001
SS-01	Navicula trivialis		2	10/25/2014	CC14SBCP001
SS-01	Nitzschia		4	10/25/2014	CC14SBCP001
SS-01	Nitzschia acicularis		1	10/25/2014	CC14SBCP001
SS-01	Nitzschia amphibia var. frauenfeldii		1	10/25/2014	CC14SBCP001
SS-01	Nitzschia dissipata		6	10/25/2014	CC14SBCP001
SS-01	Nitzschia fonticola		4	10/25/2014	CC14SBCP001
SS-01	Nitzschia inconspicua		59	10/25/2014	CC14SBCP001
SS-01	Nitzschia linearis		3	10/25/2014	CC14SBCP001
SS-01	Nitzschia palea		23	10/25/2014	CC14SBCP001
SS-01	Nitzschia paleacea		2	10/25/2014	CC14SBCP001

SS-01	Nitzschia pura		2	10/25/2014	CC14SBCP001
SS-01	Planothidium biporomum		2	10/25/2014	CC14SBCP001
SS-01	Planothidium frequentissimum		17	10/25/2014	CC14SBCP001
SS-01	Planothidium lanceolatum		16	10/25/2014	CC14SBCP001
SS-01	Planothidium rostratum		4	10/25/2014	CC14SBCP001
SS-01	Psammothidium subatomoides		1	10/25/2014	CC14SBCP001
SS-01	Pseudostaurosira brevistriata		25	10/25/2014	CC14SBCP001
SS-01	Reimeria sinuata		1	10/25/2014	CC14SBCP001
SS-01	Rhoicosphenia abbreviata		34	10/25/2014	CC14SBCP001
SS-01	Staurosira construens var. binodis		32	10/25/2014	CC14SBCP001
SS-01	Staurosira construens var. venter		41	10/25/2014	CC14SBCP001
SS-01	Staurosirella pinnata		2	10/25/2014	CC14SBCP001
SS-01	Synedra ulna		21	10/25/2014	CC14SBCP001
SS-05A	Achnanthidium minutissimum		15	10/25/2014	CC14SBCP002
SS-05A	Cocconeis placentula		2	10/25/2014	CC14SBCP002
SS-05A	Cocconeis placentula var. lineata		7	10/25/2014	CC14SBCP002
SS-05A	Diatoma vulgare		6	10/25/2014	CC14SBCP002
SS-05A	Encyonema minutum		3	10/25/2014	CC14SBCP002
SS-05A	Encyonema silesiacum		9	10/25/2014	CC14SBCP002
SS-05A	Fistulifera saprophila		93	10/25/2014	CC14SBCP002
SS-05A	Fragilaria vaucheriae		32	10/25/2014	CC14SBCP002
SS-05A	Gomphonema	Gomphonema kobayasii	2	10/25/2014	CC14SBCP002
SS-05A	Gomphonema minutum		6	10/25/2014	CC14SBCP002
SS-05A	Gomphonema parvulum		40	10/25/2014	CC14SBCP002
SS-05A	Mayamaea atomus		37	10/25/2014	CC14SBCP002
SS-05A	Melosira varians		6	10/25/2014	CC14SBCP002
SS-05A	Meridion circulare		2	10/25/2014	CC14SBCP002
SS-05A	Navicula caterva		2	10/25/2014	CC14SBCP002
SS-05A	Navicula erifuga		1	10/25/2014	CC14SBCP002
SS-05A	Navicula menisculus		1	10/25/2014	CC14SBCP002
SS-05A	Navicula minima		7	10/25/2014	CC14SBCP002
SS-05A	Nitzschia capitellata		2	10/25/2014	CC14SBCP002
SS-05A	Nitzschia dissipata		8	10/25/2014	CC14SBCP002
SS-05A	Nitzschia fonticola		17	10/25/2014	CC14SBCP002
SS-05A	Nitzschia frustulum		2	10/25/2014	CC14SBCP002
SS-05A	Nitzschia inconspicua		32	10/25/2014	CC14SBCP002
SS-05A	Nitzschia palea		120	10/25/2014	CC14SBCP002
SS-05A	Nitzschia paleacea		5	10/25/2014	CC14SBCP002
SS-05A	Nitzschia pura		1	10/25/2014	CC14SBCP002
SS-05A	Planothidium dubium		4	10/25/2014	CC14SBCP002
SS-05A	Planothidium frequentissimum		9	10/25/2014	CC14SBCP002
SS-05A	Planothidium lanceolatum		2	10/25/2014	CC14SBCP002
SS-05A	Pseudostaurosira brevistriata		4	10/25/2014	CC14SBCP002
SS-05A	Reimeria sinuata		18	10/25/2014	CC14SBCP002
SS-05A	Rhoicosphenia abbreviata		6	10/25/2014	CC14SBCP002
SS-05A	Sellaphora pupula		1	10/25/2014	CC14SBCP002
SS-05A	Staurosira construens var. binodis		22	10/25/2014	CC14SBCP002
SS-05A	Staurosira construens var. venter		72	10/25/2014	CC14SBCP002

SS-05A	Staurosirella leptostauron		2	10/25/2014	CC14SBCP002
SS-05A	Synedra ulna		2	10/25/2014	CC14SBCP002
SS-06G	Achnanthidium minutissimum		2	10/25/2014	CC14SBCP003
SS-06G	Amphora inariensis		4	10/25/2014	CC14SBCP003
SS-06G	Amphora ovalis var. pediculus		4	10/25/2014	CC14SBCP003
SS-06G	Amphora veneta		3	10/25/2014	CC14SBCP003
SS-06G	Cocconeis pediculus		4	10/25/2014	CC14SBCP003
SS-06G	Cocconeis placentula		1	10/25/2014	CC14SBCP003
SS-06G	Cocconeis placentula var. lineata		16	10/25/2014	CC14SBCP003
SS-06G	Craticula molestiformis		1	10/25/2014	CC14SBCP003
SS-06G	Cyclotella meneghiniana		5	10/25/2014	CC14SBCP003
SS-06G	Diatoma moniliformis		1	10/25/2014	CC14SBCP003
SS-06G	Diatoma vulgare		39	10/25/2014	CC14SBCP003
SS-06G	Encyonema minutum		2	10/25/2014	CC14SBCP003
SS-06G	Encyonema silesiacum		22	10/25/2014	CC14SBCP003
SS-06G	Fragilaria vaucheriae		32	10/25/2014	CC14SBCP003
SS-06G	Geissleria acceptata		4	10/25/2014	CC14SBCP003
SS-06G	Geissleria decussis		8	10/25/2014	CC14SBCP003
SS-06G	Gomphonema parvulum		6	10/25/2014	CC14SBCP003
SS-06G	Mayamaea atomus		3	10/25/2014	CC14SBCP003
SS-06G	Melosira varians		22	10/25/2014	CC14SBCP003
SS-06G	Navicula caterva		3	10/25/2014	CC14SBCP003
SS-06G	Navicula cryptocephala		2	10/25/2014	CC14SBCP003
SS-06G	Navicula erifuga		1	10/25/2014	CC14SBCP003
SS-06G	Navicula gregaria		6	10/25/2014	CC14SBCP003
SS-06G	Navicula lanceolata		2	10/25/2014	CC14SBCP003
SS-06G	Navicula minima		14	10/25/2014	CC14SBCP003
SS-06G	Navicula trivialis		2	10/25/2014	CC14SBCP003
SS-06G	Navicula veneta		2	10/25/2014	CC14SBCP003
SS-06G	Nitzschia amphibia		2	10/25/2014	CC14SBCP003
SS-06G	Nitzschia dissipata		4	10/25/2014	CC14SBCP003
SS-06G	Nitzschia fonticola		10	10/25/2014	CC14SBCP003
SS-06G	Nitzschia frustulum		2	10/25/2014	CC14SBCP003
SS-06G	Nitzschia inconspicua		29	10/25/2014	CC14SBCP003
SS-06G	Nitzschia linearis		5	10/25/2014	CC14SBCP003
SS-06G	Nitzschia palea		33	10/25/2014	CC14SBCP003
SS-06G	Nitzschia paleacea		1	10/25/2014	CC14SBCP003
SS-06G	Nitzschia pura		2	10/25/2014	CC14SBCP003
SS-06G	Nitzschia sublinearis		6	10/25/2014	CC14SBCP003
SS-06G	Nitzschia tubicola		2	10/25/2014	CC14SBCP003
SS-06G	Parlibellus protracta		1	10/25/2014	CC14SBCP003
SS-06G	Planothidium dubium		4	10/25/2014	CC14SBCP003
SS-06G	Planothidium frequentissimum		19	10/25/2014	CC14SBCP003
SS-06G	Planothidium lanceolatum		4	10/25/2014	CC14SBCP003
SS-06G	Pseudostaurosira	Pseudostaurosira parasitica (4), Pseudostaurosira parasitica var. subconstricta (5)	9	10/25/2014	CC14SBCP003
SS-06G	Pseudostaurosira brevistriata		52	10/25/2014	CC14SBCP003

SS-06G	Reimeria sinuata		3	10/25/2014	CC14SBCP003
SS-06G	Rhoicosphenia abbreviata		12	10/25/2014	CC14SBCP003
SS-06G	Sellaphora pupula		3	10/25/2014	CC14SBCP003
SS-06G	Sellaphora seminulum		2	10/25/2014	CC14SBCP003
SS-06G	Staurosira construens var. binodis		29	10/25/2014	CC14SBCP003
SS-06G	Staurosira construens var. venter		122	10/25/2014	CC14SBCP003
SS-06G	Staurosirella leptostauron		19	10/25/2014	CC14SBCP003
SS-06G	Staurosirella pinnata		2	10/25/2014	CC14SBCP003
SS-06G	Surirella angusta		4	10/25/2014	CC14SBCP003
SS-06G	Synedra ulna		8	10/25/2014	CC14SBCP003
SS-07	Cocconeis placentula var. lineata		2	10/26/2014	CC14SBCP004
SS-07	Diatoma vulgare		10	10/26/2014	CC14SBCP004
SS-07	Encyonema silesiacum		9	10/26/2014	CC14SBCP004
SS-07	Fistulifera saprophila		3	10/26/2014	CC14SBCP004
SS-07	Fragilaria vaucheriae		8	10/26/2014	CC14SBCP004
SS-07	Gomphonema parvulum	Gomphonema parvulum f. saprophilum (2)	37	10/26/2014	CC14SBCP004
SS-07	Mayamaea atomus		63	10/26/2014	CC14SBCP004
SS-07	Melosira varians		4	10/26/2014	CC14SBCP004
SS-07	Meridion circulare		1	10/26/2014	CC14SBCP004
SS-07	Navicula minima		129	10/26/2014	CC14SBCP004
SS-07	Navicula subminuscula		3	10/26/2014	CC14SBCP004
SS-07	Nitzschia fonticola		3	10/26/2014	CC14SBCP004
SS-07	Nitzschia palea		20	10/26/2014	CC14SBCP004
SS-07	Nitzschia paleacea		2	10/26/2014	CC14SBCP004
SS-07	Nitzschia sublinearis		2	10/26/2014	CC14SBCP004
SS-07	Planothidium frequentissimum		6	10/26/2014	CC14SBCP004
SS-07	Planothidium lanceolatum		6	10/26/2014	CC14SBCP004
SS-07	Pseudostaurosira	Pseudostaurosira parasitica	2	10/26/2014	CC14SBCP004
SS-07	Rhoicosphenia abbreviata		2	10/26/2014	CC14SBCP004
SS-07	Sellaphora seminulum		266	10/26/2014	CC14SBCP004
SS-07	Staurosira construens var. binodis		5	10/26/2014	CC14SBCP004
SS-07	Staurosira construens var. venter		14	10/26/2014	CC14SBCP004
SS-07	Synedra ulna		2	10/26/2014	CC14SBCP004
SS-07	Thalassiosira pseudonana		1	10/26/2014	CC14SBCP004
SS-08	Achnanthidium minutissimum		4	10/26/2014	CC14SBCP005
SS-08	Cocconeis placentula		5	10/26/2014	CC14SBCP005
SS-08	Cocconeis placentula var. lineata		9	10/26/2014	CC14SBCP005
SS-08	Cyclotella meneghiniana		1	10/26/2014	CC14SBCP005
SS-08	Diatoma vulgare		2	10/26/2014	CC14SBCP005
SS-08	Encyonema silesiacum		30	10/26/2014	CC14SBCP005
SS-08	Eunotia bilunaris		2	10/26/2014	CC14SBCP005
SS-08	Fistulifera saprophila		2	10/26/2014	CC14SBCP005
SS-08	Gomphonema parvulum		46	10/26/2014	CC14SBCP005
SS-08	Lemnicola hungarica		1	10/26/2014	CC14SBCP005
SS-08	Mayamaea atomus		58	10/26/2014	CC14SBCP005
SS-08	Melosira varians		1	10/26/2014	CC14SBCP005
SS-08	Navicula minima		174	10/26/2014	CC14SBCP005

SS-08	Navicula subminuscula		2	10/26/2014	CC14SBCP005
SS-08	Nitzschia amphibia		16	10/26/2014	CC14SBCP005
SS-08	Nitzschia capitellata		2	10/26/2014	CC14SBCP005
SS-08	Nitzschia fonticola		12	10/26/2014	CC14SBCP005
SS-08	Nitzschia inconspicua		50	10/26/2014	CC14SBCP005
SS-08	Nitzschia palea		29	10/26/2014	CC14SBCP005
SS-08	Planothidium frequentissimum		15	10/26/2014	CC14SBCP005
SS-08	Planothidium lanceolatum		27	10/26/2014	CC14SBCP005
SS-08	Reimeria sinuata		6	10/26/2014	CC14SBCP005
SS-08	Rhoicosphenia abbreviata		12	10/26/2014	CC14SBCP005
SS-08	Sellaphora seminulum		63	10/26/2014	CC14SBCP005
SS-08	Staurosira construens var. venter		31	10/26/2014	CC14SBCP005
SS-08	Synedra ulna		2	10/26/2014	CC14SBCP005
SS-10A	Cocconeis placentula		3	11/1/2014	CC14SBCP006
SS-10A	Cocconeis placentula var. lineata		20	11/1/2014	CC14SBCP006
SS-10A	Craticula molestiformis		1	11/1/2014	CC14SBCP006
SS-10A	Cyclotella meneghiniana		4	11/1/2014	CC14SBCP006
SS-10A	Cymbella naviculiformis		1	11/1/2014	CC14SBCP006
SS-10A	Encyonema silesiacum		27	11/1/2014	CC14SBCP006
SS-10A	Fragilaria vaucheriae		3	11/1/2014	CC14SBCP006
SS-10A	Gomphonema parvulum		23	11/1/2014	CC14SBCP006
SS-10A	Hantzschia amphioxys		1	11/1/2014	CC14SBCP006
SS-10A	Mayamaea atomus		192	11/1/2014	CC14SBCP006
SS-10A	Navicula lanceolata		1	11/1/2014	CC14SBCP006
SS-10A	Navicula minima		66	11/1/2014	CC14SBCP006
SS-10A	Navicula submuralis		7	11/1/2014	CC14SBCP006
SS-10A	Nitzschia amphibia		42	11/1/2014	CC14SBCP006
SS-10A	Nitzschia dissipata		2	11/1/2014	CC14SBCP006
SS-10A	Nitzschia fonticola		1	11/1/2014	CC14SBCP006
SS-10A	Nitzschia frustulum		7	11/1/2014	CC14SBCP006
SS-10A	Nitzschia inconspicua		124	11/1/2014	CC14SBCP006
SS-10A	Nitzschia linearis		1	11/1/2014	CC14SBCP006
SS-10A	Nitzschia palea		16	11/1/2014	CC14SBCP006
SS-10A	Planothidium frequentissimum		14	11/1/2014	CC14SBCP006
SS-10A	Planothidium lanceolatum		6	11/1/2014	CC14SBCP006
SS-10A	Pseudostaurosira brevistriata		4	11/1/2014	CC14SBCP006
SS-10A	Reimeria sinuata		1	11/1/2014	CC14SBCP006
SS-10A	Rhoicosphenia abbreviata		14	11/1/2014	CC14SBCP006
SS-10A	Sellaphora pupula		2	11/1/2014	CC14SBCP006
SS-10A	Sellaphora seminulum		6	11/1/2014	CC14SBCP006
SS-10A	Staurosira construens var. venter		7	11/1/2014	CC14SBCP006
SS-10A	Synedra ulna		4	11/1/2014	CC14SBCP006
SS-10B	Amphora ovalis var. pediculus		2	11/1/2014	CC14SBCP007
SS-10B	Amphora veneta		2	11/1/2014	CC14SBCP007
SS-10B	Cocconeis placentula		30	11/1/2014	CC14SBCP007
SS-10B	Cocconeis placentula var. lineata		28	11/1/2014	CC14SBCP007
SS-10B	Cyclotella meneghiniana		4	11/1/2014	CC14SBCP007
SS-10B	Encyonema minutum		2	11/1/2014	CC14SBCP007

SS-10B	Encyonema silesiacum		33	11/1/2014	CC14SBCP007
SS-10B	Fragilaria vaucheriae		11	11/1/2014	CC14SBCP007
SS-10B	Geissleria acceptata		2	11/1/2014	CC14SBCP007
SS-10B	Gomphonema parvulum		12	11/1/2014	CC14SBCP007
SS-10B	Mayamaea atomus		33	11/1/2014	CC14SBCP007
SS-10B	Melosira varians		4	11/1/2014	CC14SBCP007
SS-10B	Meridion circulare		2	11/1/2014	CC14SBCP007
SS-10B	Navicula lanceolata		6	11/1/2014	CC14SBCP007
SS-10B	Navicula menisculus		1	11/1/2014	CC14SBCP007
SS-10B	Navicula minima		69	11/1/2014	CC14SBCP007
SS-10B	Navicula subminuscula		1	11/1/2014	CC14SBCP007
SS-10B	Navicula submuralis		4	11/1/2014	CC14SBCP007
SS-10B	Nitzschia amphibia		47	11/1/2014	CC14SBCP007
SS-10B	Nitzschia dissipata		2	11/1/2014	CC14SBCP007
SS-10B	Nitzschia fonticola		10	11/1/2014	CC14SBCP007
SS-10B	Nitzschia inconspicua		69	11/1/2014	CC14SBCP007
SS-10B	Nitzschia linearis		3	11/1/2014	CC14SBCP007
SS-10B	Nitzschia palea		22	11/1/2014	CC14SBCP007
SS-10B	Planothidium frequentissimum		26	11/1/2014	CC14SBCP007
SS-10B	Planothidium lanceolatum		13	11/1/2014	CC14SBCP007
SS-10B	Pseudostaurosira	Pseudostaurosira parasitica (2), Pseudostaurosira parasitica var. subconstricta (2)	4	11/1/2014	CC14SBCP007
SS-10B	Pseudostaurosira brevistriata		38	11/1/2014	CC14SBCP007
SS-10B	Reimeria sinuata		3	11/1/2014	CC14SBCP007
SS-10B	Rhoicosphenia abbreviata		23	11/1/2014	CC14SBCP007
SS-10B	Sellaphora seminulum		9	11/1/2014	CC14SBCP007
SS-10B	Staurosira construens		8	11/1/2014	CC14SBCP007
SS-10B	Staurosira construens var. venter		58	11/1/2014	CC14SBCP007
SS-10B	Staurosirella leptostauron		11	11/1/2014	CC14SBCP007
SS-10B	Surirella angusta		2	11/1/2014	CC14SBCP007
SS-10B	Synedra ulna		6	11/1/2014	CC14SBCP007
SS-11C	Achnanthidium minutissimum		5	11/1/2014	CC14SBCP008
SS-11C	Amphora inariensis		2	11/1/2014	CC14SBCP008
SS-11C	Cocconeis placentula		26	11/1/2014	CC14SBCP008
SS-11C	Cocconeis placentula var. lineata		8	11/1/2014	CC14SBCP008
SS-11C	Cyclotella meneghiniana		14	11/1/2014	CC14SBCP008
SS-11C	Diatoma vulgare		1	11/1/2014	CC14SBCP008
SS-11C	Encyonema silesiacum		71	11/1/2014	CC14SBCP008
SS-11C	Fragilaria vaucheriae		21	11/1/2014	CC14SBCP008
SS-11C	Gomphonema parvulum		14	11/1/2014	CC14SBCP008
SS-11C	Mayamaea atomus		27	11/1/2014	CC14SBCP008
SS-11C	Melosira varians		5	11/1/2014	CC14SBCP008
SS-11C	Meridion circulare		2	11/1/2014	CC14SBCP008
SS-11C	Navicula lanceolata		2	11/1/2014	CC14SBCP008
SS-11C	Navicula minima		35	11/1/2014	CC14SBCP008
SS-11C	Navicula submuralis		2	11/1/2014	CC14SBCP008
SS-11C	Navicula trivialis		4	11/1/2014	CC14SBCP008

SS-11C	Nitzschia amphibia		107	11/1/2014	CC14SBCP008
SS-11C	Nitzschia capitellata		4	11/1/2014	CC14SBCP008
SS-11C	Nitzschia fonticola		6	11/1/2014	CC14SBCP008
SS-11C	Nitzschia frustulum		1	11/1/2014	CC14SBCP008
SS-11C	Nitzschia inconspicua		56	11/1/2014	CC14SBCP008
SS-11C	Nitzschia palea		31	11/1/2014	CC14SBCP008
SS-11C	Nitzschia sublinearis		2	11/1/2014	CC14SBCP008
SS-11C	Planothidium frequentissimum		28	11/1/2014	CC14SBCP008
SS-11C	Planothidium lanceolatum		15	11/1/2014	CC14SBCP008
SS-11C	Pseudostaurosira brevistriata		2	11/1/2014	CC14SBCP008
SS-11C	Reimeria sinuata		4	11/1/2014	CC14SBCP008
SS-11C	Rhoicosphenia abbreviata		7	11/1/2014	CC14SBCP008
SS-11C	Sellaphora pupula		2	11/1/2014	CC14SBCP008
SS-11C	Sellaphora seminulum		4	11/1/2014	CC14SBCP008
SS-11C	Staurosira construens var. binodis		24	11/1/2014	CC14SBCP008
SS-11C	Staurosira construens var. venter		48	11/1/2014	CC14SBCP008
SS-11C	Staurosirella leptostauron		5	11/1/2014	CC14SBCP008
SS-11C	Stephanodiscus parvus		2	11/1/2014	CC14SBCP008
SS-11C	Synedra ulna		19	11/1/2014	CC14SBCP008
SS-11D	Achnanthidium minutissimum		7	11/1/2014	CC14SBCP009
SS-11D	Amphora veneta		2	11/1/2014	CC14SBCP009
SS-11D	Cocconeis placentula		19	11/1/2014	CC14SBCP009
SS-11D	Cocconeis placentula var. lineata		5	11/1/2014	CC14SBCP009
SS-11D	Cyclotella meneghiniana		9	11/1/2014	CC14SBCP009
SS-11D	Diatoma vulgare		2	11/1/2014	CC14SBCP009
SS-11D	Encyonema silesiacum		64	11/1/2014	CC14SBCP009
SS-11D	Fragilaria vaucheriae		21	11/1/2014	CC14SBCP009
SS-11D	Gomphonema parvulum		8	11/1/2014	CC14SBCP009
SS-11D	Mayamaea atomus		39	11/1/2014	CC14SBCP009
SS-11D	Melosira varians		12	11/1/2014	CC14SBCP009
SS-11D	Navicula minima		35	11/1/2014	CC14SBCP009
SS-11D	Navicula submuralis		2	11/1/2014	CC14SBCP009
SS-11D	Navicula veneta		4	11/1/2014	CC14SBCP009
SS-11D	Nitzschia amphibia		66	11/1/2014	CC14SBCP009
SS-11D	Nitzschia archibaldii		4	11/1/2014	CC14SBCP009
SS-11D	Nitzschia fonticola		6	11/1/2014	CC14SBCP009
SS-11D	Nitzschia frustulum		1	11/1/2014	CC14SBCP009
SS-11D	Nitzschia inconspicua		59	11/1/2014	CC14SBCP009
SS-11D	Nitzschia linearis		3	11/1/2014	CC14SBCP009
SS-11D	Nitzschia palea		20	11/1/2014	CC14SBCP009
SS-11D	Nitzschia paleacea		6	11/1/2014	CC14SBCP009
SS-11D	Planothidium frequentissimum		13	11/1/2014	CC14SBCP009
SS-11D	Planothidium lanceolatum		8	11/1/2014	CC14SBCP009
SS-11D	Pseudostaurosira brevistriata		19	11/1/2014	CC14SBCP009
SS-11D	Reimeria sinuata		4	11/1/2014	CC14SBCP009
SS-11D	Rhoicosphenia abbreviata		3	11/1/2014	CC14SBCP009
SS-11D	Sellaphora seminulum		2	11/1/2014	CC14SBCP009
SS-11D	Staurosira construens var. binodis		10	11/1/2014	CC14SBCP009

SS-11D	Staurosira construens var. venter		107	11/1/2014	CC14SBCP009
SS-11D	Staurosirella leptostauron		3	11/1/2014	CC14SBCP009
SS-11D	Staurosirella pinnata		8	11/1/2014	CC14SBCP009
SS-11D	Surirella angusta		1	11/1/2014	CC14SBCP009
SS-11D	Synedra ulna		28	11/1/2014	CC14SBCP009
SS-13	Adlafia minuscula		2	11/3/2014	CC14SBCP010
SS-13	Amphora veneta		1	11/3/2014	CC14SBCP010
SS-13	Caloneis bacillum		2	11/3/2014	CC14SBCP010
SS-13	Cocconeis placentula		22	11/3/2014	CC14SBCP010
SS-13	Cocconeis placentula var. lineata		6	11/3/2014	CC14SBCP010
SS-13	Craticula molestiformis		1	11/3/2014	CC14SBCP010
SS-13	Cyclotella atomus		2	11/3/2014	CC14SBCP010
SS-13	Cyclotella meneghiniana		15	11/3/2014	CC14SBCP010
SS-13	Diatoma vulgare		1	11/3/2014	CC14SBCP010
SS-13	Encyonema minutum		2	11/3/2014	CC14SBCP010
SS-13	Encyonema silesiacum		32	11/3/2014	CC14SBCP010
SS-13	Fragilaria vaucheriae		20	11/3/2014	CC14SBCP010
SS-13	Fragilariforma bicapitata		2	11/3/2014	CC14SBCP010
SS-13	Gomphonema parvulum		20	11/3/2014	CC14SBCP010
SS-13	Mayamaea atomus		35	11/3/2014	CC14SBCP010
SS-13	Melosira varians		18	11/3/2014	CC14SBCP010
SS-13	Navicula minima		45	11/3/2014	CC14SBCP010
SS-13	Navicula subminuscula		4	11/3/2014	CC14SBCP010
SS-13	Navicula submuralis		2	11/3/2014	CC14SBCP010
SS-13	Nitzschia amphibia		65	11/3/2014	CC14SBCP010
SS-13	Nitzschia archibaldii		1	11/3/2014	CC14SBCP010
SS-13	Nitzschia capitellata		2	11/3/2014	CC14SBCP010
SS-13	Nitzschia fonticola		4	11/3/2014	CC14SBCP010
SS-13	Nitzschia frustulum		4	11/3/2014	CC14SBCP010
SS-13	Nitzschia inconspicua		58	11/3/2014	CC14SBCP010
SS-13	Nitzschia palea		25	11/3/2014	CC14SBCP010
SS-13	Nitzschia paleacea		1	11/3/2014	CC14SBCP010
SS-13	Pinnularia borealis		2	11/3/2014	CC14SBCP010
SS-13	Planothidium dubium		2	11/3/2014	CC14SBCP010
SS-13	Planothidium frequentissimum		23	11/3/2014	CC14SBCP010
SS-13	Planothidium lanceolatum		15	11/3/2014	CC14SBCP010
SS-13	Pseudostaurosira brevistriata		28	11/3/2014	CC14SBCP010
SS-13	Rhoicosphenia abbreviata		17	11/3/2014	CC14SBCP010
SS-13	Sellaphora seminulum		3	11/3/2014	CC14SBCP010
SS-13	Staurosira construens var. binodis		58	11/3/2014	CC14SBCP010
SS-13	Staurosira construens var. venter		28	11/3/2014	CC14SBCP010
SS-13	Staurosirella leptostauron		12	11/3/2014	CC14SBCP010
SS-13	Staurosirella pinnata		2	11/3/2014	CC14SBCP010
SS-13	Synedra ulna		18	11/3/2014	CC14SBCP010
SS-14	Adlafia minuscula		3	11/3/2014	CC14SBCP011
SS-14	Amphora veneta		9	11/3/2014	CC14SBCP011
SS-14	Cocconeis placentula		29	11/3/2014	CC14SBCP011
SS-14	Cocconeis placentula var. lineata		11	11/3/2014	CC14SBCP011

SS-14	Cyclotella meneghiniana		15	11/3/2014	CC14SBCP011
SS-14	Encyonema silesiacum		62	11/3/2014	CC14SBCP011
SS-14	Fistulifera saprophila		4	11/3/2014	CC14SBCP011
SS-14	Fragilaria vaucheriae		16	11/3/2014	CC14SBCP011
SS-14	Gomphonema parvulum		20	11/3/2014	CC14SBCP011
SS-14	Mayamaea atomus		84	11/3/2014	CC14SBCP011
SS-14	Melosira varians		1	11/3/2014	CC14SBCP011
SS-14	Navicula caterva		2	11/3/2014	CC14SBCP011
SS-14	Navicula minima		37	11/3/2014	CC14SBCP011
SS-14	Nitzschia		4	11/3/2014	CC14SBCP011
SS-14	Nitzschia amphibia		79	11/3/2014	CC14SBCP011
SS-14	Nitzschia archibaldii		7	11/3/2014	CC14SBCP011
SS-14	Nitzschia fonticola		4	11/3/2014	CC14SBCP011
SS-14	Nitzschia frustulum		5	11/3/2014	CC14SBCP011
SS-14	Nitzschia inconspicua		48	11/3/2014	CC14SBCP011
SS-14	Nitzschia palea		31	11/3/2014	CC14SBCP011
SS-14	Parlibellus protracta		1	11/3/2014	CC14SBCP011
SS-14	Planothidium dubium		1	11/3/2014	CC14SBCP011
SS-14	Planothidium frequentissimum		25	11/3/2014	CC14SBCP011
SS-14	Planothidium lanceolatum		12	11/3/2014	CC14SBCP011
SS-14	Pseudostaurosira	Pseudostaurosira parasitica	1	11/3/2014	CC14SBCP011
SS-14	Reimeria sinuata		3	11/3/2014	CC14SBCP011
SS-14	Rhoicosphenia abbreviata		19	11/3/2014	CC14SBCP011
SS-14	Sellaphora seminulum		4	11/3/2014	CC14SBCP011
SS-14	Staurosira construens var. binodis		24	11/3/2014	CC14SBCP011
SS-14	Staurosira construens var. venter		29	11/3/2014	CC14SBCP011
SS-14	Staurosirella leptostauron		3	11/3/2014	CC14SBCP011
SS-14	Staurosirella pinnata		5	11/3/2014	CC14SBCP011
SS-14	Surirella brebissonii var. kuetzingii		1	11/3/2014	CC14SBCP011
SS-14	Synedra ulna		1	11/3/2014	CC14SBCP011
SS-15A	Achnanthidium minutissimum		6	11/3/2014	CC14SBCP012
SS-15A	Amphora veneta		5	11/3/2014	CC14SBCP012
SS-15A	Caloneis bacillum		4	11/3/2014	CC14SBCP012
SS-15A	Caloneis schumanniana		1	11/3/2014	CC14SBCP012
SS-15A	Cocconeis placentula		8	11/3/2014	CC14SBCP012
SS-15A	Cocconeis placentula var. lineata		12	11/3/2014	CC14SBCP012
SS-15A	Cyclotella meneghiniana		10	11/3/2014	CC14SBCP012
SS-15A	Diatoma vulgare		1	11/3/2014	CC14SBCP012
SS-15A	Encyonema silesiacum		72	11/3/2014	CC14SBCP012
SS-15A	Fistulifera saprophila		6	11/3/2014	CC14SBCP012
SS-15A	Fragilaria vaucheriae		46	11/3/2014	CC14SBCP012
SS-15A	Gomphonema parvulum		23	11/3/2014	CC14SBCP012
SS-15A	Mayamaea atomus		48	11/3/2014	CC14SBCP012
SS-15A	Melosira varians		1	11/3/2014	CC14SBCP012
SS-15A	Navicula cryptocephala		2	11/3/2014	CC14SBCP012
SS-15A	Navicula minima		42	11/3/2014	CC14SBCP012
SS-15A	Navicula subminuscula		1	11/3/2014	CC14SBCP012
SS-15A	Navicula veneta		2	11/3/2014	CC14SBCP012

SS-15A	Nitzschia acidoclinata		2	11/3/2014	CC14SBCP012
SS-15A	Nitzschia amphibia		45	11/3/2014	CC14SBCP012
SS-15A	Nitzschia archibaldii		6	11/3/2014	CC14SBCP012
SS-15A	Nitzschia dissipata		3	11/3/2014	CC14SBCP012
SS-15A	Nitzschia fonticola		8	11/3/2014	CC14SBCP012
SS-15A	Nitzschia inconspicua		45	11/3/2014	CC14SBCP012
SS-15A	Nitzschia palea		34	11/3/2014	CC14SBCP012
SS-15A	Planothidium frequentissimum		21	11/3/2014	CC14SBCP012
SS-15A	Planothidium lanceolatum		14	11/3/2014	CC14SBCP012
SS-15A	Pseudostaurosira brevistriata		6	11/3/2014	CC14SBCP012
SS-15A	Rhoicosphenia abbreviata		11	11/3/2014	CC14SBCP012
SS-15A	Sellaphora seminulum		12	11/3/2014	CC14SBCP012
SS-15A	Staurosira construens var. binodis		32	11/3/2014	CC14SBCP012
SS-15A	Staurosira construens var. venter		51	11/3/2014	CC14SBCP012
SS-15A	Staurosirella leptostauron		9	11/3/2014	CC14SBCP012
SS-15A	Surirella angusta		3	11/3/2014	CC14SBCP012
SS-15A	Synedra ulna		8	11/3/2014	CC14SBCP012
SS-15B	Achnanthidium	Achnanthidium rivulare	2	11/3/2014	CC14SBCP013
SS-15B	Achnanthidium minutissimum		2	11/3/2014	CC14SBCP013
SS-15B	Adlafia minuscula		3	11/3/2014	CC14SBCP013
SS-15B	Amphora veneta		7	11/3/2014	CC14SBCP013
SS-15B	Cocconeis placentula		10	11/3/2014	CC14SBCP013
SS-15B	Cocconeis placentula var. lineata		11	11/3/2014	CC14SBCP013
SS-15B	Craticula molestiformis		2	11/3/2014	CC14SBCP013
SS-15B	Cyclotella meneghiniana		15	11/3/2014	CC14SBCP013
SS-15B	Diatoma moniliformis		7	11/3/2014	CC14SBCP013
SS-15B	Diatoma vulgare		1	11/3/2014	CC14SBCP013
SS-15B	Encyonema silesiacum		66	11/3/2014	CC14SBCP013
SS-15B	Epithemia sorex		2	11/3/2014	CC14SBCP013
SS-15B	Fragilaria vaucheriae		44	11/3/2014	CC14SBCP013
SS-15B	Gomphonema parvulum		30	11/3/2014	CC14SBCP013
SS-15B	Gomphonema truncatum		2	11/3/2014	CC14SBCP013
SS-15B	Mayamaea atomus		66	11/3/2014	CC14SBCP013
SS-15B	Melosira varians		2	11/3/2014	CC14SBCP013
SS-15B	Navicula lanceolata		1	11/3/2014	CC14SBCP013
SS-15B	Navicula minima		36	11/3/2014	CC14SBCP013
SS-15B	Navicula subminuscula		2	11/3/2014	CC14SBCP013
SS-15B	Navicula submuralis		1	11/3/2014	CC14SBCP013
SS-15B	Navicula veneta		2	11/3/2014	CC14SBCP013
SS-15B	Nitzschia amphibia		51	11/3/2014	CC14SBCP013
SS-15B	Nitzschia archibaldii		2	11/3/2014	CC14SBCP013
SS-15B	Nitzschia fonticola		2	11/3/2014	CC14SBCP013
SS-15B	Nitzschia inconspicua		54	11/3/2014	CC14SBCP013
SS-15B	Nitzschia linearis		4	11/3/2014	CC14SBCP013
SS-15B	Nitzschia palea		48	11/3/2014	CC14SBCP013
SS-15B	Nitzschia paleacea		1	11/3/2014	CC14SBCP013
SS-15B	Nitzschia pura		2	11/3/2014	CC14SBCP013
SS-15B	Planothidium dubium		1	11/3/2014	CC14SBCP013

SS-15B	Planothidium frequentissimum		16	11/3/2014	CC14SBCP013
SS-15B	Planothidium lanceolatum		14	11/3/2014	CC14SBCP013
SS-15B	Reimeria sinuata		4	11/3/2014	CC14SBCP013
SS-15B	Rhoicosphenia abbreviata		18	11/3/2014	CC14SBCP013
SS-15B	Sellaphora pupula		1	11/3/2014	CC14SBCP013
SS-15B	Sellaphora seminulum		4	11/3/2014	CC14SBCP013
SS-15B	Staurosira construens var. binodis		27	11/3/2014	CC14SBCP013
SS-15B	Staurosira construens var. venter		29	11/3/2014	CC14SBCP013
SS-15B	Staurosirella leptostauron		4	11/3/2014	CC14SBCP013
SS-15B	Surirella angusta		2	11/3/2014	CC14SBCP013
SS-15B	Synedra ulna		2	11/3/2014	CC14SBCP013
SS-15G	Achnanthidium minutissimum		24	11/3/2014	CC14SBCP014
SS-15G	Adlafia minuscula		1	11/3/2014	CC14SBCP014
SS-15G	Amphora ovalis var. pediculus		2	11/3/2014	CC14SBCP014
SS-15G	Cocconeis pediculus		5	11/3/2014	CC14SBCP014
SS-15G	Cocconeis placentula		13	11/3/2014	CC14SBCP014
SS-15G	Cocconeis placentula var. lineata		67	11/3/2014	CC14SBCP014
SS-15G	Craticula molestiformis		1	11/3/2014	CC14SBCP014
SS-15G	Cyclotella atomus		1	11/3/2014	CC14SBCP014
SS-15G	Diadesmis gallica		6	11/3/2014	CC14SBCP014
SS-15G	Diatoma moniliformis		24	11/3/2014	CC14SBCP014
SS-15G	Didymosphenia geminata		1	11/3/2014	CC14SBCP014
SS-15G	Encyonema silesiacum		53	11/3/2014	CC14SBCP014
SS-15G	Fragilaria vaucheriae		4	11/3/2014	CC14SBCP014
SS-15G	Gomphonema	Gomphonema kobayasii (5)	7	11/3/2014	CC14SBCP014
SS-15G	Gomphonema angustatum		3	11/3/2014	CC14SBCP014
SS-15G	Gomphonema minutum		5	11/3/2014	CC14SBCP014
SS-15G	Gomphonema olivaceum		1	11/3/2014	CC14SBCP014
SS-15G	Gomphonema rhombicum		7	11/3/2014	CC14SBCP014
SS-15G	Mayamaea atomus		9	11/3/2014	CC14SBCP014
SS-15G	Melosira varians		1	11/3/2014	CC14SBCP014
SS-15G	Meridion circulare		2	11/3/2014	CC14SBCP014
SS-15G	Navicula antonii		2	11/3/2014	CC14SBCP014
SS-15G	Navicula caterva		33	11/3/2014	CC14SBCP014
SS-15G	Navicula cryptocephala		4	11/3/2014	CC14SBCP014
SS-15G	Navicula cryptotenella		47	11/3/2014	CC14SBCP014
SS-15G	Navicula gregaria		2	11/3/2014	CC14SBCP014
SS-15G	Navicula minima		16	11/3/2014	CC14SBCP014
SS-15G	Navicula tripunctata		65	11/3/2014	CC14SBCP014
SS-15G	Nitzschia dissipata		30	11/3/2014	CC14SBCP014
SS-15G	Nitzschia inconspicua		20	11/3/2014	CC14SBCP014
SS-15G	Nitzschia linearis		12	11/3/2014	CC14SBCP014
SS-15G	Nitzschia palea		7	11/3/2014	CC14SBCP014
SS-15G	Nitzschia paleacea		24	11/3/2014	CC14SBCP014
SS-15G	Pinnularia subcapitata		1	11/3/2014	CC14SBCP014
SS-15G	Planothidium dubium		10	11/3/2014	CC14SBCP014
SS-15G	Planothidium frequentissimum		10	11/3/2014	CC14SBCP014
SS-15G	Planothidium lanceolatum		12	11/3/2014	CC14SBCP014

SS-15G	Planothidium rostratum		6	11/3/2014	CC14SBCP014
SS-15G	Reimeria sinuata		6	11/3/2014	CC14SBCP014
SS-15G	Rhoicosphenia abbreviata		37	11/3/2014	CC14SBCP014
SS-15G	Staurosira construens var. venter		10	11/3/2014	CC14SBCP014
SS-15G	Staurosirella leptostauron		2	11/3/2014	CC14SBCP014
SS-15G	Staurosirella pinnata		4	11/3/2014	CC14SBCP014
SS-15G	Surirella brebissonii var. kuetzingii		2	11/3/2014	CC14SBCP014
SS-15G	Synedra ulna		1	11/3/2014	CC14SBCP014
SS-16B	Amphora veneta		19	11/3/2014	CC14SBCP015
SS-16B	Cocconeis placentula		2	11/3/2014	CC14SBCP015
SS-16B	Cocconeis placentula var. lineata		5	11/3/2014	CC14SBCP015
SS-16B	Cyclotella meneghiniana		5	11/3/2014	CC14SBCP015
SS-16B	Encyonema minutum		2	11/3/2014	CC14SBCP015
SS-16B	Encyonema silesiacum		7	11/3/2014	CC14SBCP015
SS-16B	Fragilaria vaucheriae		17	11/3/2014	CC14SBCP015
SS-16B	Geissleria decussis		2	11/3/2014	CC14SBCP015
SS-16B	Gomphonema	Gomphonema kobayasii	2	11/3/2014	CC14SBCP015
SS-16B	Gomphonema parvulum		20	11/3/2014	CC14SBCP015
SS-16B	Mayamaea atomus		211	11/3/2014	CC14SBCP015
SS-16B	Meridion circulare		1	11/3/2014	CC14SBCP015
SS-16B	Navicula subminuscula		10	11/3/2014	CC14SBCP015
SS-16B	Nitzschia		2	11/3/2014	CC14SBCP015
SS-16B	Nitzschia amphibia		27	11/3/2014	CC14SBCP015
SS-16B	Nitzschia archibaldii		12	11/3/2014	CC14SBCP015
SS-16B	Nitzschia dissipata		6	11/3/2014	CC14SBCP015
SS-16B	Nitzschia fonticola		18	11/3/2014	CC14SBCP015
SS-16B	Nitzschia inconspicua		12	11/3/2014	CC14SBCP015
SS-16B	Nitzschia palea		170	11/3/2014	CC14SBCP015
SS-16B	Planothidium lanceolatum		5	11/3/2014	CC14SBCP015
SS-16B	Pseudostaurosira brevistriata		7	11/3/2014	CC14SBCP015
SS-16B	Rhoicosphenia abbreviata		3	11/3/2014	CC14SBCP015
SS-16B	Sellaphora pupula		4	11/3/2014	CC14SBCP015
SS-16B	Staurosira construens var. binodis		10	11/3/2014	CC14SBCP015
SS-16B	Staurosira construens var. venter		20	11/3/2014	CC14SBCP015
SS-16B	Synedra ulna		1	11/3/2014	CC14SBCP015
SS-17D	Amphora ovalis var. pediculus		2	11/4/2014	CC14SBCP016
SS-17D	Amphora veneta		30	11/4/2014	CC14SBCP016
SS-17D	Cocconeis placentula		2	11/4/2014	CC14SBCP016
SS-17D	Cocconeis placentula var. lineata		1	11/4/2014	CC14SBCP016
SS-17D	Cyclotella meneghiniana		3	11/4/2014	CC14SBCP016
SS-17D	Encyonema silesiacum		31	11/4/2014	CC14SBCP016
SS-17D	Epithemia adnata		2	11/4/2014	CC14SBCP016
SS-17D	Fistulifera saprophila		8	11/4/2014	CC14SBCP016
SS-17D	Fragilaria vaucheriae		3	11/4/2014	CC14SBCP016
SS-17D	Gomphonema parvulum		7	11/4/2014	CC14SBCP016
SS-17D	Mayamaea atomus		131	11/4/2014	CC14SBCP016
SS-17D	Navicula lanceolata		1	11/4/2014	CC14SBCP016
SS-17D	Navicula minima		50	11/4/2014	CC14SBCP016

SS-17D	Navicula subminuscula		6	11/4/2014	CC14SBCP016
SS-17D	Nitzschia		2	11/4/2014	CC14SBCP016
SS-17D	Nitzschia amphibia		19	11/4/2014	CC14SBCP016
SS-17D	Nitzschia archibaldii		2	11/4/2014	CC14SBCP016
SS-17D	Nitzschia fonticola		116	11/4/2014	CC14SBCP016
SS-17D	Nitzschia frustulum		8	11/4/2014	CC14SBCP016
SS-17D	Nitzschia inconspicua		39	11/4/2014	CC14SBCP016
SS-17D	Nitzschia linearis		2	11/4/2014	CC14SBCP016
SS-17D	Nitzschia palea		91	11/4/2014	CC14SBCP016
SS-17D	Planothidium lanceolatum		6	11/4/2014	CC14SBCP016
SS-17D	Reimeria sinuata		1	11/4/2014	CC14SBCP016
SS-17D	Rhoicosphenia abbreviata		6	11/4/2014	CC14SBCP016
SS-17D	Staurosira construens var. venter		22	11/4/2014	CC14SBCP016
SS-17D	Staurosirella leptostauron		4	11/4/2014	CC14SBCP016
SS-17D	Surirella angusta		1	11/4/2014	CC14SBCP016
SS-17D	Surirella brebissonii var. kuetzingii		3	11/4/2014	CC14SBCP016
SS-17D	Synedra ulna		1	11/4/2014	CC14SBCP016
SS-19	Achnanthidium minutissimum		6	11/4/2014	CC14SBCP017
SS-19	Adlafia minuscula		2	11/4/2014	CC14SBCP017
SS-19	Amphora veneta		39	11/4/2014	CC14SBCP017
SS-19	Cocconeis placentula		9	11/4/2014	CC14SBCP017
SS-19	Cocconeis placentula var. lineata		2	11/4/2014	CC14SBCP017
SS-19	Cyclotella meneghiniana		10	11/4/2014	CC14SBCP017
SS-19	Diatoma moniliformis		2	11/4/2014	CC14SBCP017
SS-19	Encyonema silesiacum		34	11/4/2014	CC14SBCP017
SS-19	Fistulifera saprophila		2	11/4/2014	CC14SBCP017
SS-19	Fragilaria capucina		1	11/4/2014	CC14SBCP017
SS-19	Fragilaria vaucheriae		22	11/4/2014	CC14SBCP017
SS-19	Gomphonema		2	11/4/2014	CC14SBCP017
SS-19	Gomphonema parvulum		11	11/4/2014	CC14SBCP017
SS-19	Mayamaea atomus		133	11/4/2014	CC14SBCP017
SS-19	Melosira varians		5	11/4/2014	CC14SBCP017
SS-19	Navicula canalis		2	11/4/2014	CC14SBCP017
SS-19	Navicula caterva		2	11/4/2014	CC14SBCP017
SS-19	Navicula cryptocephala		2	11/4/2014	CC14SBCP017
SS-19	Navicula lanceolata		1	11/4/2014	CC14SBCP017
SS-19	Navicula minima		27	11/4/2014	CC14SBCP017
SS-19	Navicula subminuscula		4	11/4/2014	CC14SBCP017
SS-19	Navicula veneta		7	11/4/2014	CC14SBCP017
SS-19	Nitzschia amphibia		14	11/4/2014	CC14SBCP017
SS-19	Nitzschia amphibia var. frauenfeldii		1	11/4/2014	CC14SBCP017
SS-19	Nitzschia archibaldii		2	11/4/2014	CC14SBCP017
SS-19	Nitzschia fonticola		19	11/4/2014	CC14SBCP017
SS-19	Nitzschia frustulum		3	11/4/2014	CC14SBCP017
SS-19	Nitzschia inconspicua		29	11/4/2014	CC14SBCP017
SS-19	Nitzschia lacunarum		2	11/4/2014	CC14SBCP017
SS-19	Nitzschia palea		92	11/4/2014	CC14SBCP017
SS-19	Nitzschia paleacea		1	11/4/2014	CC14SBCP017

SS-19	Nitzschia sociabilis		2	11/4/2014	CC14SBCP017
SS-19	Nitzschia sublinearis		2	11/4/2014	CC14SBCP017
SS-19	Parlibellus protracta		1	11/4/2014	CC14SBCP017
SS-19	Planothidium frequentissimum		18	11/4/2014	CC14SBCP017
SS-19	Planothidium lanceolatum		8	11/4/2014	CC14SBCP017
SS-19	Pseudostaurosira brevistriata		15	11/4/2014	CC14SBCP017
SS-19	Reimeria sinuata		2	11/4/2014	CC14SBCP017
SS-19	Rhoicosphenia abbreviata		9	11/4/2014	CC14SBCP017
SS-19	Sellaphora pupula		7	11/4/2014	CC14SBCP017
SS-19	Sellaphora seminulum		4	11/4/2014	CC14SBCP017
SS-19	Staurosira construens var. binodis		8	11/4/2014	CC14SBCP017
SS-19	Staurosira construens var. venter		25	11/4/2014	CC14SBCP017
SS-19	Staurosirella leptostauron		2	11/4/2014	CC14SBCP017
SS-19	Surirella	Surirella hoefleri	2	11/4/2014	CC14SBCP017
SS-19	Surirella brebissonii var. kuetzingii		6	11/4/2014	CC14SBCP017
SS-19	Synedra ulna		1	11/4/2014	CC14SBCP017

APPENDIX I

REVEGETATION MONITORING PHOTOS: SUBAREAS 1 AND 2

APPENDIX I
REVEGETATION MONITORING PHOTOS: SUBAREAS 1 AND 2

Figure I1. The trail hand-seeding in Reach B: Silver sagebrush, tarragon, blanketflower, and rubber rabbitbrush (upper photo). *Solidago gigantea* below.

Figure I2. Transect 19b, the first transect in Reach B, is in the transition zone. Stratified plant cover exceeded 100%, but it traverses areas of poor soil too.

Figure I3. Lots of plant cover (95%) and some willows at Transect 20, a fairly moist site.

Figure I4. Seeded native legume goldenbanner along T20.

Figure I5. Plant cover is down at T21. Blond plant litter denoting loss of perennials.

Figure I6. T24 also showed a sharp reduction in perennial plant cover in 2014. The tall bunchgrass is basin wildrye, which dominates.

Figure I7. Perennial cover is down at T25. The decline is probably due to contamination at the west end and a thick litter accumulation at this end.

Figure I8. Plot at west end of T25. Repairs are planned soon.

Figure I9. Shrubby part of T25 with goldenbanner in foreground.

Figure I10. Contamination from the pipeline likely reduced plant cover at T26.

Figure I11. Thick basin wildrye typifies T27, but there are some voids. Still, total perennial plant cover was 86%, undiminished since 2010.

Figure I12. T28.

Figure I13. Dead shrub on T28. The broadleaf biennial is not designated noxious.

Figure I14. Residual contamination at the origin of T29. Plant cover is diminished.

Figure I15. Basin wildrye and creeping meadow foxtail on T30.

Figure I16. Streambanks in Reach C are dense with willow and silver buffaloberry. Banks are not sampled because it is impractical.

Figure I17. Dense *Cladophora* in Silver Bow Creek indicates excess nutrients and likely increases willow growth.

Figure I18. Silver Bow Creek, Reach C; Booth willow in right foreground.

Figure I19. Transect 31, upland to subirrigated, received twice the usual compost rate. Perennial plant cover here reduced to 61%. Sweetclover denotes low fertility from compost.

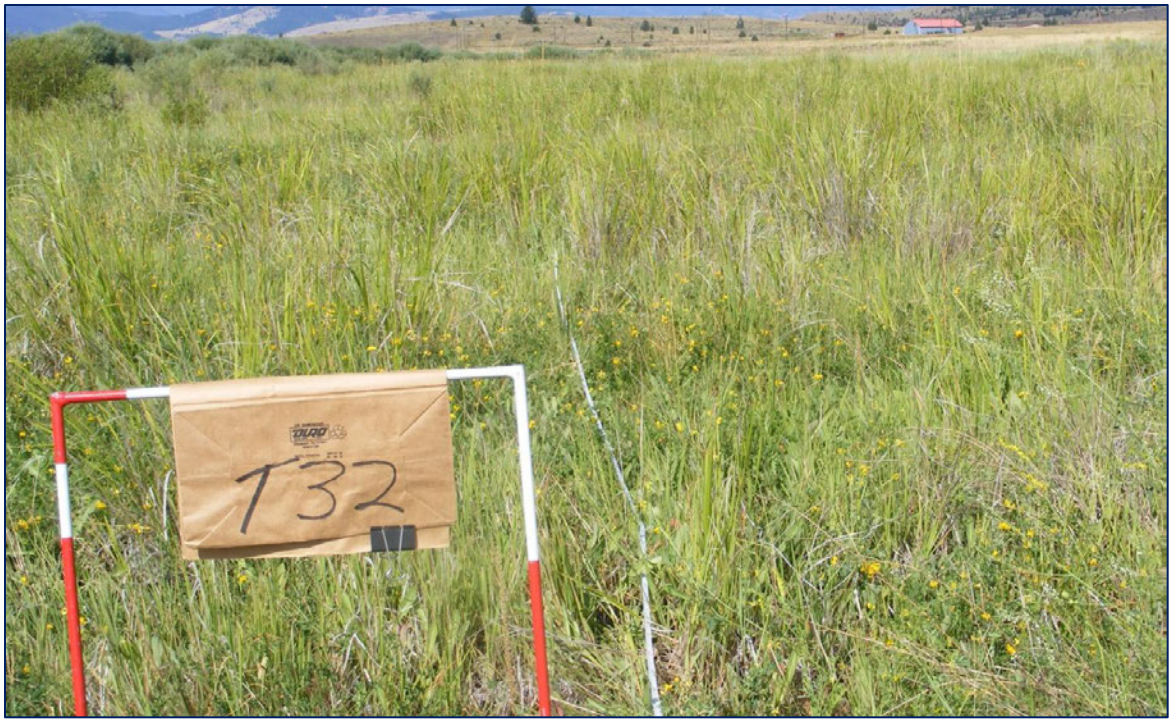

Figure I20. Poor survival of woody transplants at T32. Perennial cover increased since 2010 at this subirrigated site. Bird's-foot trefoil and creeping meadow foxtail are the most abundant species as well as sowthistle. Shrubs are rare.

Figure I21. Many shrubs and trees were transplanted into T34 but few remain. Growth of surviving transplanted aspens has been poor.

Figure I22. Bird's-foot trefoil, the yellow flower, accounts for half the plant cover at T35 in the transition zone.

Figure I23. Native *Solidago gigantea*, Reach B, August.

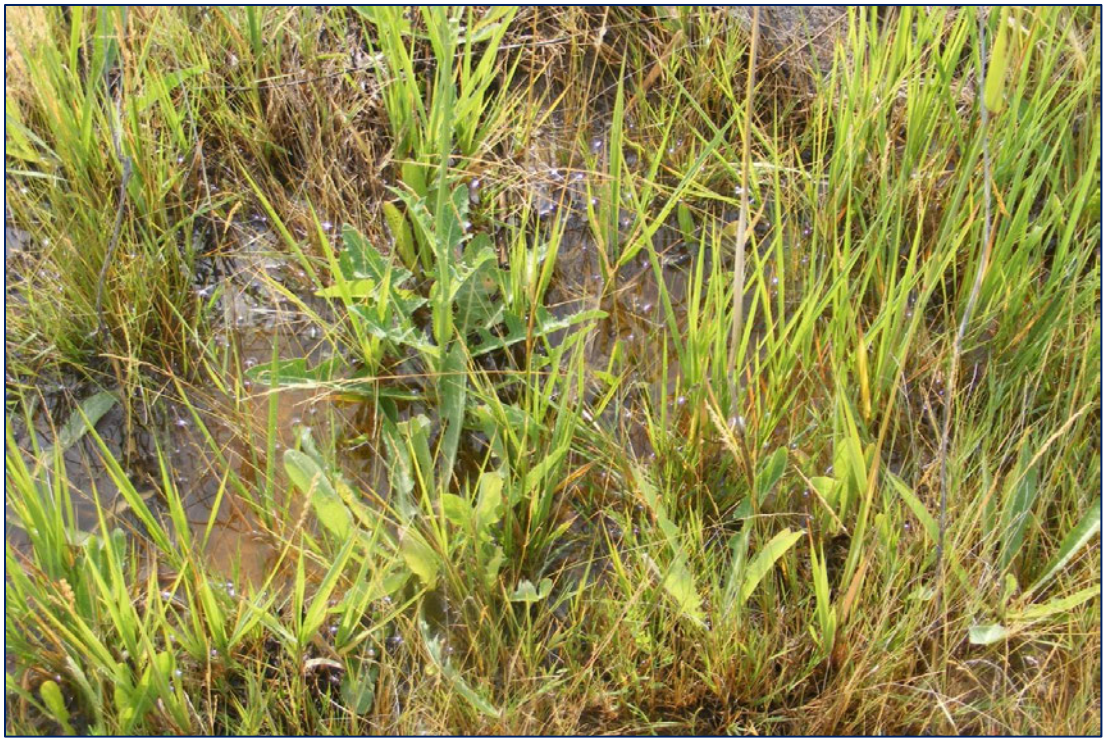

Figure I24. T37 represents mainly the grass showing between the buffaloberries. Unseeded, introduced grasses are dominant. Water pooled in furrow in lower photo suggests that sodicity is limiting infiltration, but perennial plant cover was 97%. Cover has been constant since 2007.

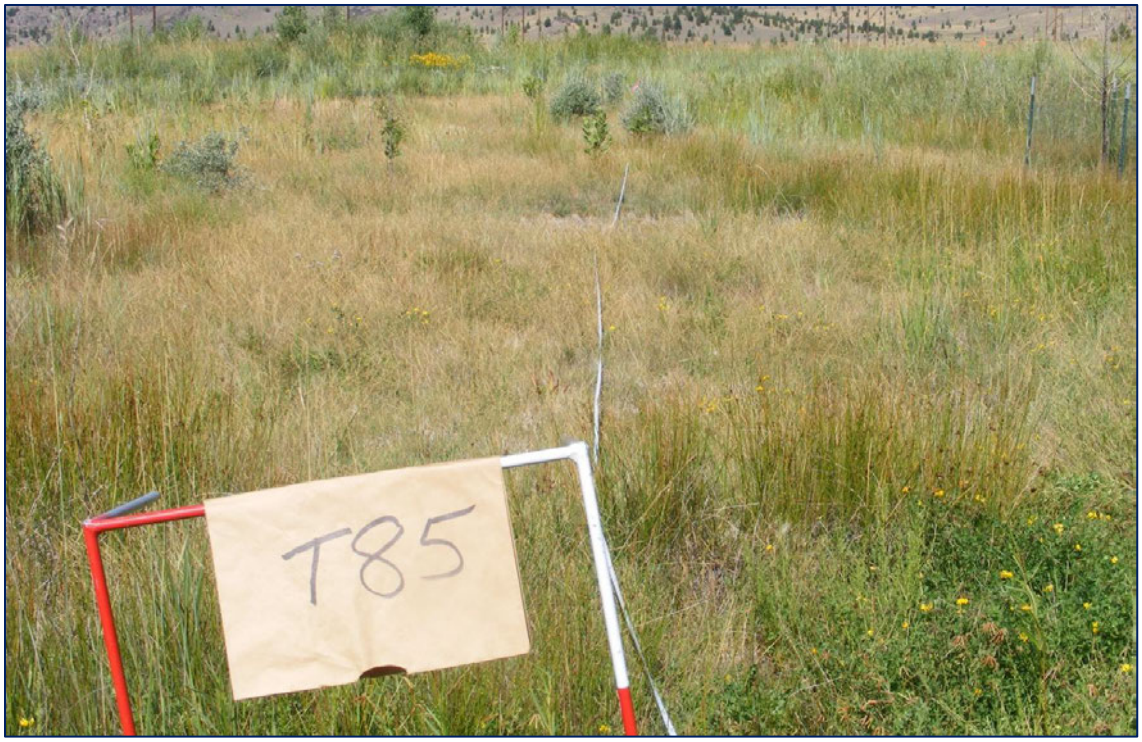

Figure I25. Transect 85 in Reach J has some salty soil, and alkaligrass is the dominant species, but its abundance is down from the last sample period.

Figure I26. Volunteer *Plantago eriopoda* is an indicator of moist, salty soil at T85.

Figure I27. Volunteer *Symphyotrichum ericoides* in foreground and seeded western aster behind. Purple flower on left is alfalfa; most of the soil at T85 likely won't support legumes.

Figure I28. Non-weed volunteers outside wetlands are uncommon in SSTOU revegetation. White heath aster (same as in preceding figure) at T85 is an exception.

Figure I29. Transect 86 in Reach J is more subirrigated than transition zone. Perennial cover was 94% with alfalfa dominant and basin wildrye subdominant. (Second photo taken at mid-transect.)

Figure I30. Transect 87 has two types of revegetation (two seeding or soil types) that are visible in this photo. Foreground is sheep fescue, Junegrass, and a little alfalfa.

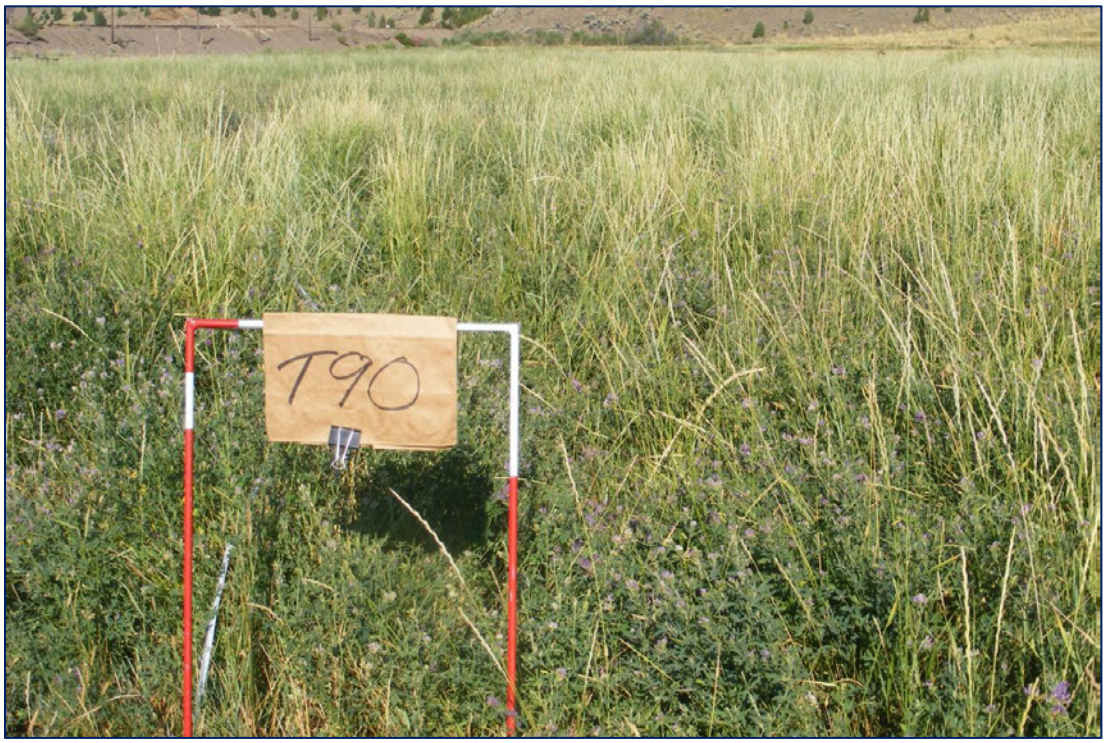

Figure I31. T90 north of the Rarus Line represents a grazing seed mix.

Figure I32. West of T90 the field has been seeded and mowed; horses graze this field too.

APPENDIX J

REVEGETATION MONITORING PHOTOS: SUBAREAS 3 AND 4

APPENDIX J
REVEGETATION MONITORING PHOTOS: SUBAREAS 3 AND 4

Figure J1. Change Order 25 in Reach K south of the BN line west of Miles Crossing. Pictured is sagebrush, alfalfa, and basin wildrye.

Figure J2. Hand-seeding along the railroad bank.

Figure J3. Basin wildrye-alfalfa at eye-level; central CO 25.

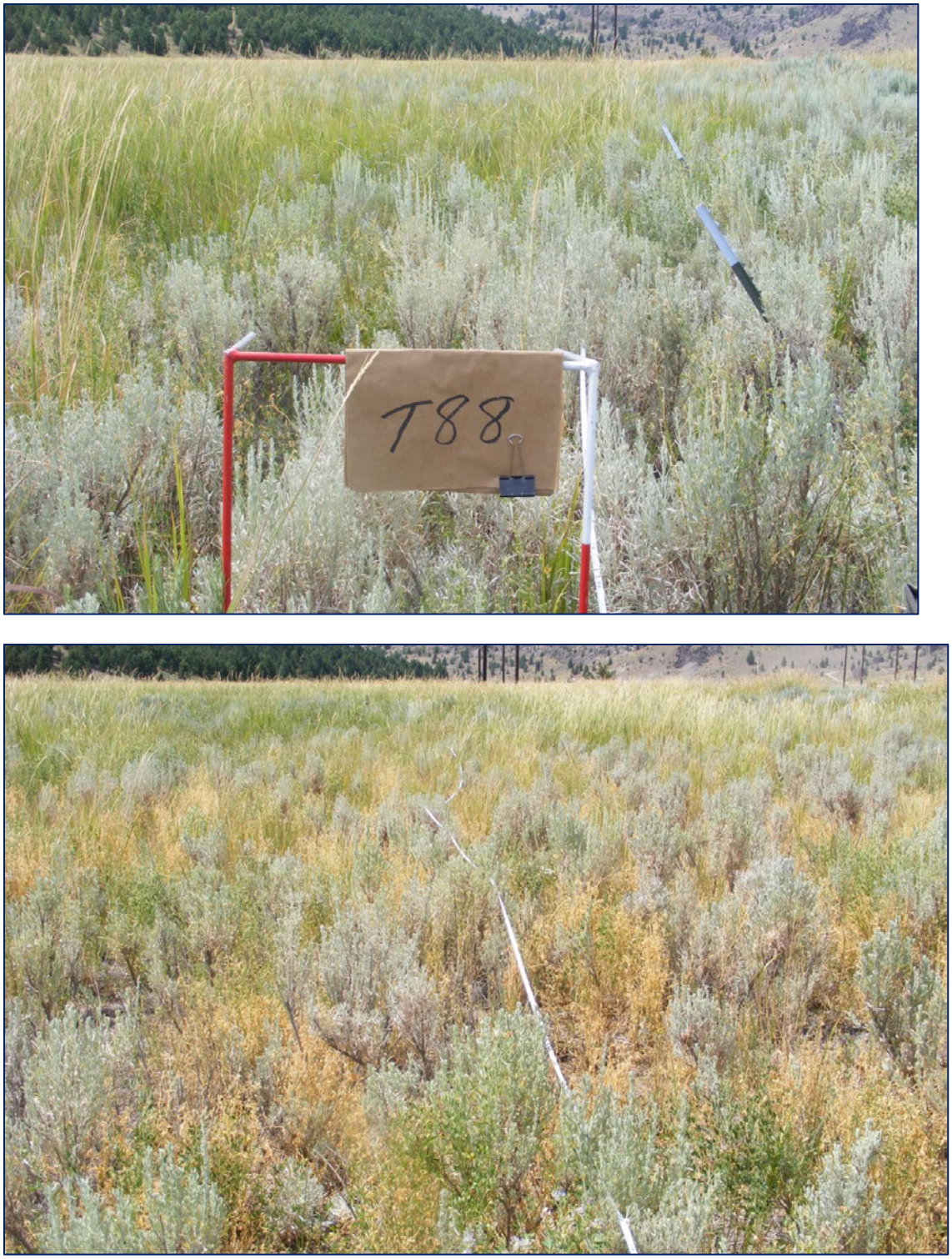

Figure J4. Origin (top) and middle (lower photo) of Transect 88 in eastern CO 25. Silver and big sagebrush are co-dominant with about 15% canopy coverage each. Tan plant is dormant alfalfa.

Figure J5. Half the relative cover on T88 comes from basin wildrye, while another 40% comes from alfalfa, which is below the wildrye and harder to see here.

Figure J6. Old stream channel with a bit of standing water in August is unproductive compared to adjacent uplands, denoting edaphic impairment.

Figure J7. Old channel, CO 25. Impairment may be from soils or groundwater.

Figure J8. Eastern CO 25; sagebrush south of the BN line.

Figure J9. West from Reach K June 2011 (upper panel) and August 2014 (lower panel). Coversoil or compost that were washed away in 2011 were not replaced but area was reseeded.

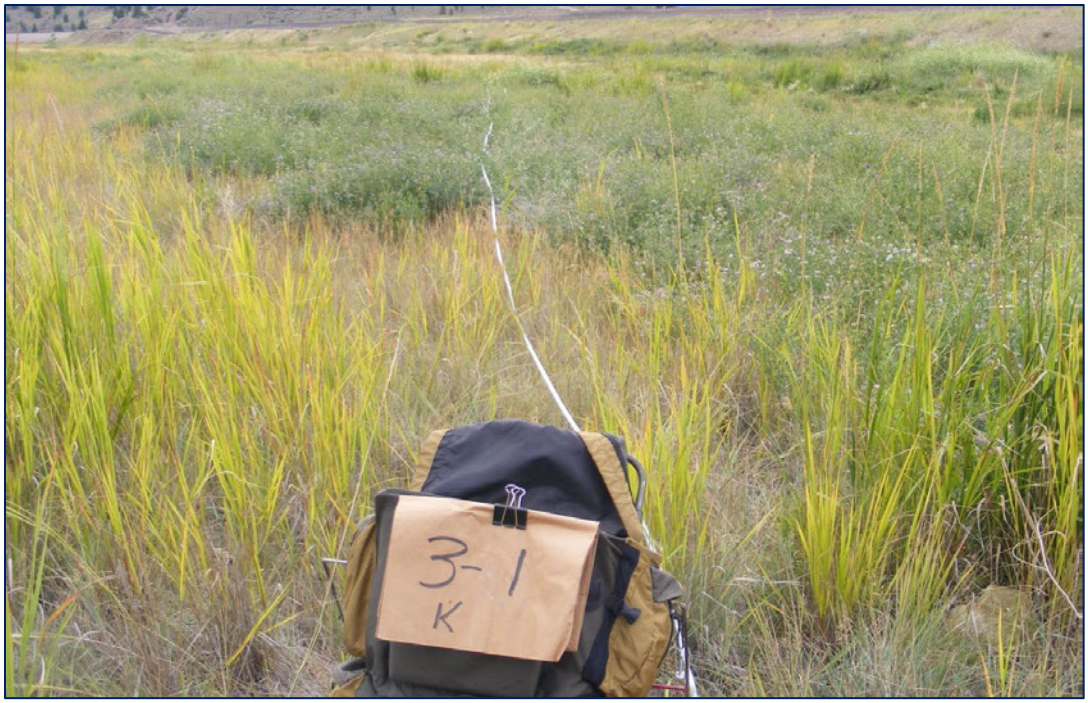

Figure J10. Alfalfa denotes a soil boundary on Transect 91 (renumbered). Hydrology is Subirrigated-Transition Zone-Wetland. This area had an average of 3.3 plants/foot^2 with 90% stocking despite some water along the transect.

Figure J11. Transect 92 (3-2) was had high plant density despite apparent impairment from the railroad banks evident here at the transect origin. Three inches of August rain contributed to surface water.

Figure J12. Old stream channel by Transect 91 or 92 is now a wetland.

Figure J13. Transect 94 begins in grassy revegetation; upland hydrology.

Figure J14. Transect 94.

Figure J15. Contaminated dirt and redtop are evident at the origin of old transect 4-1 in SUBAREA 4.

Figure J16. Kochia was small but plentiful at Transect 4-40 in 2012 revegetation. It is 60% in situ and 40% coversoil. Annual kochia provided more than half the relative cover.

Figure J17. Transect 4-41 was in coversoil. Important species were Indian ricegrass, tumblemustard, kochia, and thickspike wheatgrass. Sagebrush also was present.

Figure J18. T4-42 is transition-zone hydrology. Species present included kochia big bluegrass, slender and thickspike wheatgrasses, and tumblemustard.

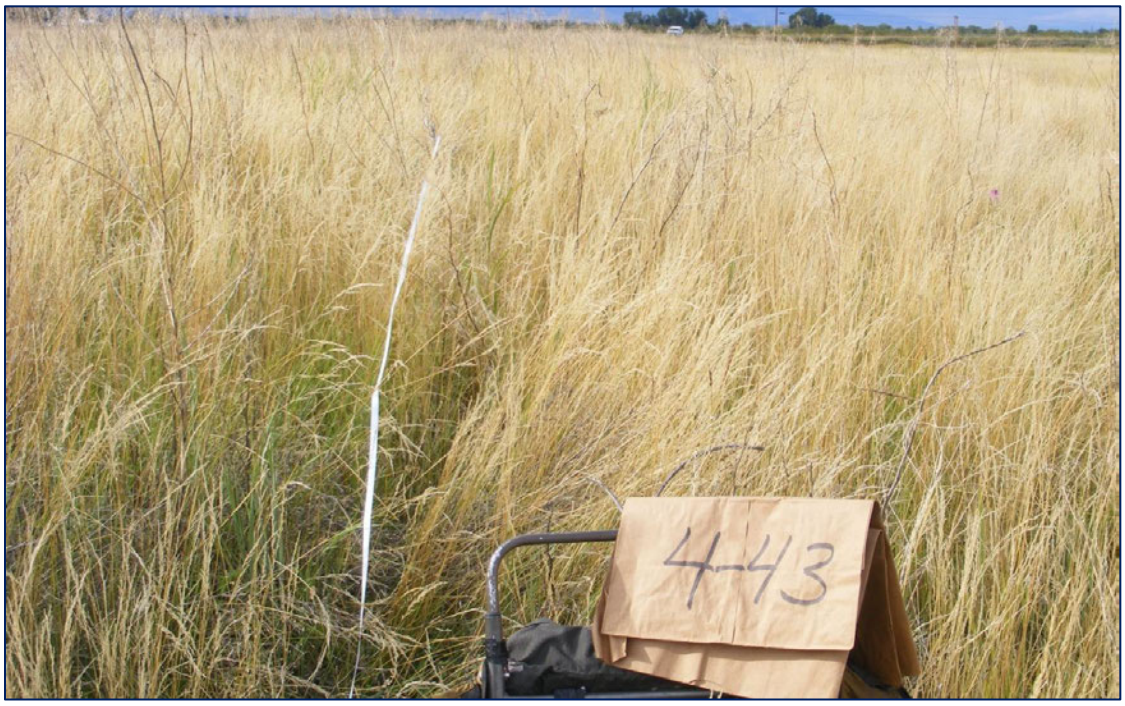

Figure J19. Transect 4-43. Overall, seedling density was 1.9/foot^2 with 83% stocking.

Figure J20. Transect 4-44 had 700 big sagebrush/ha. Cudweed sagewort was more common than big sagebrush.

Figure J21. Transect 4-45 had big bluegrass at 4-45. The north end is a wetland.

Figure J22. Transect 4-46 appears adequately stocked.

Figure J23. Transect 4-47 was marginally stocked, probably due to the rocky substrate.

Figure J24. Transect 4-48 has subirrigated hydrology. It is adequately stocked with grasses, but has few other growth-forms.

APPENDIX K

2014 CANOPY COVERAGE AND FREQUENCY

APPENDIX K
2014 CANOPY COVERAGE AND FREQUENCY

REACHES B and C in Subarea 1
REACH J in Subarea 2
REACH K in Subarea 3
And REACHES R and S in Subarea 4

From the Long-Term Monitoring Plan:

Minimum Canopy Coverage Approximately 10 Years after Seeding in Years of Near-normal Seasonal Precipitation.

HYDROLOGIC ZONE	AVERAGE PERENNIAL CANOPY COVERAGE
Uplands, Subirrigated	60%
Streambanks, Transition Zone	80%
Wetlands (not open water)	100%

Table C1. Transect 19b, Reach B, 2014, Canopy Coverage and Frequency, Transition Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL GRASSES			
Elymus cinereus	2.5	2.4	5
Elymus smithii	0.8	0.8	10
Elymus trachycaulus	1.0	0.9	10
Festuca rubra	5.3	5.0	25
Juncus arcticus	1.5	1.4	5
Subtotal	11.1	10.5	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	0.7	0.7	10
Agrostis stolonifera var. *palustris*	1.0	0.9	10
Alopecurus arundinaceus	29.9	28.3	90
Festuca ovina	1.3	1.2	15
Poa compressa	7.7	7.3	50
Subtotal	40.6	38.4	
NATIVE PERENNIAL FORBS			
Achillea millefolium	2.1	2.0	15
Potentilla anserina	0.6	0.6	10
Ranunculus cymbalaria	0.2	0.2	5
Symphyotrichum ascendens	0.2	0.2	5
Symphyotrichum ericoides	0.2	0.2	5
Thermopsis montana	1.0	0.9	5
Subtotal	4.3	4.1	
INTRODUCED PERENNIAL FORBS			
Sonchus arvensis	1.7	1.6	10
Taraxacum officinale	0.5	0.5	10
Subtotal	2.2	2.1	

Table C1 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED PERENNIAL LEGUMES			
Lotus corniculatus	12.3	11.6	30
Medicago lupulina	0.3	0.3	5
Trifolium repens	18.3	17.3	55
Subtotal	30.9	29.2	
NATIVE SHRUBS			
Salix bebbiana	0.8	0.8	5
Salix exigua	13.2	12.5	20
Shephardia argentea	2.5	2.4	5
Subtotal	16.5	15.7	
Total Plant Cover	105.6	100.0	
Bare Soil	4.0		55
Coarse Fragments	0.5		30
Plant Litter	80.2		100

Table C2. Transect 20, Reach B, 2014, Canopy Coverage and Frequency, Subirrigated-Transition Zone. Repair at 10-m sample.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL GRASSES			
Elymus cinereus	7.1	7.4	35
Elymus trachycaulus	3.0	3.1	30
Festua rubra	5.0	5.2	20
Hordeum jubatum	1.0	1.0	10
Puccinellia nuttalliana	1.0	1.0	10
Subtotal	17.1	17.7	

Table C2 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	9.4	9.8	65
Alopecurus arundinaceus	20.0	21.0	65
Poa compressa	1.2	1.3	15
Subtotal	30.6	32.1	
NATIVE PERENNIAL FORBS			
Achillea millefolium	0.1	0.1	5
Aster ericoides	0.2	0.2	5
Potentilla anserina	0.5	0.5	5
Thermopsis montana	4.5	4.7	5
Subtotal	5.3	5.5	
INTRODUCED PERENNIAL FORBS			
Taraxacum officinale	0.3	0.3	20
INTRODUCED PERENNIAL LEGUMES			
Lotus corniculatus	8.5	8.9	15
Medicago sativa	5.6	5.9	15
Trifolium repens	11.5	12.1	45
Subtotal	25.6	26.9	
NATIVE SHRUBS			
Salix bebbiana	5.5	5.8	15
Salix boothii	1.1	1.1	5
Salix exigua	10.0	10.6	15
Subtotal	16.6	17.5	
Total Plant Cover	95.5	100.0	
Bare Soil	8.2		40
Coarse Fragments	0.8		25
Plant Litter	78.7		100

Table C3. Transect 21, Reach B, 2014, Canopy Coverage and Frequency, Subirrigated Zone. Some poor soil.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
ANNUAL AND BIENNIAL FORBS			
Oenothera strigosus	0.5	0.6	5
Sisymbrium altissimum & S. loesellii	3.0	3.8	10
Subtotal	3.5	4.4	
NATIVE PERENNIAL GRASSES			
Deschampsia cespitosa	1.4	1.8	10
Elymus cinereus	10.2	12.8	35
Elymus lanceolatus	0.8	1.0	10
Elymus trachycaulus	4.3	5.4	35
Festuca ovina	0.9	1.1	15
Festuca rubra	1.2	1.5	10
Hordeum jubatum	0.5	0.6	15
Poa juncifolia var. ampla	0.7	0.9	10
Pascopyrum smithii	1.0	1.3	10
Subtotal	21.0	26.4	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	2.0	2.5	15
Alopecurus arundinaceus	7.5	9.4	60
Bromus inermis	0.2	0.2	5
Poa compressa	9.4	11.8	70
Subtotal	19.1	23.9	
NATIVE PERENNIAL FORBS			
Achillea millefolium	7.7	9.7	20
Artemisia frigida	0.7	0.9	5
Symphyotrichum ciliatum	0.2	0.2	10
Subtotal	8.6	10.8	
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	8.9	11.2	30
Trifolium repens	13.3	16.7	35
Subtotal	22.2	27.9	

Table C3 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%		
NATIVE SHRUBS			
Ericameria nauseosa	2.2	2.8	15
NATIVE TREES			
Populus tremuloides	3.0	3.8	15
Total Plant Cover	79.6	100.0	
Bare Soil	9.9		55
Coarse Fragments	1.6		30
Plant Litter	77.0		100

Table C4. Transect 22, Reach B, 2014, Canopy Coverage and Frequency, Mostly Repaired Upland Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%		
ANNUAL AND BIENNIAL FORBS			
Camelina microcarpa	0.1	0.3	10
ANNUAL GRASSES			
Bromus tectorum	0.4	1.1	10
NATIVE PERENNIAL GRASSES			
Achnatherum hymenoides	0.2	0.5	5
Bouteloua gracilis	0.3	0.8	5
Elymus lanceolatus	1.3	3.6	20
Pascopyrum smithii	0.3	0.8	5
Poa juncifolia var. *ampla*	0.4	1.1	15
Subtotal	2.5	6.8	

Table C4 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
INTRODUCED PERENNIAL GRASSES			
Festuca ovina	3.8	10.5	35
Psathyrostachys juncea	20.0	55.4	65
	---	---	
Subtotal	23.8	65.9	
NATIVE PERENNIAL FORBS			
Epilobium or Gayophytum	0.1	0.3	10
Phacelia hastata	0.2	0.6	5
	---	---	
Subtotal	0.3	0.9	
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	1.5	4.2	15
NATIVE SUBSHRUBS			
Artemisia frigida	2.2	6.1	35
Artemisia ludoviciana	0.7	2.0	10
	---	---	
Subtotal	2.9	8.1	
NATIVE SHRUBS			
Artemisia tridentata	2.8	7.8	30
Ericameria nauseosa	1.8	5.0	40
	---	---	
Subtotal	4.6	12.8	
Total Plant Cover	36.1	100.1	
Bare Soil	48.3		95
Coarse Fragments	22.9		90
Litter	21.1		100

TRANSECT 23 2014 DATA ARE MISSING.

This is a double-compost area.

Table C5. Transect 24, Reach B, 2014, Canopy Coverage and Frequency, Subirrigated Zone. Some contamination west end.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL GRASSES			
Elymus cinereus	23.7	36.0	65
Elymus trachycaulus	3.8	5.8	35
Pascopyrum smithii	0.8	1.2	10
Subtotal	28.3	43.0	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	2.5	3.8	25
Alopecurus arundinaceus	8.4	12.8	40
Bromus inermis	0.7	1.1	10
Poa compressa	2.3	3.5	25
Subtotal	13.9	21.2	
NATIVE PERENNIAL FORBS			
Achillea millefolium	2.4	3.6	20
Symphyotrichum ericoides	0.2	0.3	5
Subtotal	2.6	3.9	
INTRODUCED PERENNIAL FORBS			
Taraxacum officinale	0.2	0.3	10
INTRODUCED LEGUMES			
Lotus corniculatus	2.5	3.8	10
Medicago sativa	2.5	3.8	15
Trifolium repens	14.0	21.3	55
Subtotal	19.0	28.9	
NATIVE SHRUBS			
Ericameria nauseosa	1.8	2.7	15
Total Plant Cover	65.8	100.0	
Bare Soil	8.5		50
Coarse Fragments	0.4		30
Litter	79.6		100

Table C6. Transect 25, Reach B, 2014, Canopy Coverage and Frequency, Subirrigated Zone. Crosses pipeline disturbance.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED BIENNIALS			
Lactuca serriola	2.0	2.3	15
NATIVE PERENNIAL GRASSES			
Elymus trachycaulus	2.5	2.8	20
Leymus cinerus	4.5	5.1	25
Puccinellia nuttalliana	0.5	0.6	10
Subtotal	7.5	8.5	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	2.6	3.9	30
Alopecurus arundinaceus	32.7	36.8	95
Poa compressa	4.8	5.4	20
Subtotal	40.1	46.1	
NATIVE PERENNIAL FORBS			
Achillea millefolium	0.8	0.9	15
Symphyotrichum ericoides	0.4	0.5	5
Subtotal	1.3	1.5	
INTRODUCED LEGUMES			
Lotus corniculatus	13.0	14.6	30
Medicago sativa	1.0	1.1	10
Trifolium repens	13.2	14.8	40
Subtotal	27.0	30.5	

Table C6 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
SHRUBS			
Chrysothamnus nauseosus	0.6	0.7	5
Salix exigua	9.4	10.5	35
	---	---	
Subtotal	11.0	11.2	
Total Plant Cover	88.9	100.1	
Bare Soil	10.6		25
Coarse Fragments	1.8		25
Litter	77.2		100

Table C7. Transect 26, Reach B, 2014, Canopy Coverage and Frequency, Upland Zone. Some contamination from buried cable or pipeline, e.g., at 35m plot 7.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
INTRODUCED ANNUALS			
Bassia scoparia	0.4	0.7	10
Sisymbrium loeselii	2.0	3.4	5
	---	---	
	2.4	4.1	
NATIVE PERENNIAL GRASSES & GRASSLIKE			
Equisetum laevigatum	1.0	1.7	5
Koeleria macrantha	0.2	0.4	5
Leymus cinereus	2.0	3.4	15
Poa juncifolia var. *ampla*	0.6	1.0	10
Puccinellia nuttalliana	0.5	0.8	10
	---	---	
Subtotal	4.3	7.3	
INTRODUCED PERENNIAL GRASSES			
Psathyrostachys juncea	41.1	69.4	100
Thinopyrum intermedium	0.2	0.3	5
	---	---	
Subtotal	41.3	69.7	

Table C7 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
NATIVE PERENNIAL FORBS			
Achillea millefolium	1.3	2.2	15
Artemisia ludoviciana	0.2	0.3	5
	---	---	
Subtotal	1.5	2.5	
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa (Ladak 65)	4.1	6.9	30
NATIVE SHRUBS			
Artemisia cana	1.4	2.4	10
Artemisia tridentata	0.2	0.3	5
Eriameria nauseosus	4.0	6.8	35
	---	---	
Subtotal	5.6	9.5	
Total Plant Cover	59.2	100.0	
Bare Soil	42.4		100
Coarse Fragments	9.3		90
Litter	37.4		100

Table C8. Transect 27, Reach B, 2014, Canopy Coverage and Frequency, Upland Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
INTRODUCED ANNUALS			
Sisymbrium loeselii	6.2	6.7	15
NATIVE PERENNIAL GRASSES			
Elymus lanceolatus	0.5	0.5	5
Elymus smithii	1.3	1.4	10
Elymus trachycaulus	2.7	3.0	45
Leymus cinereus	61.0	66.0	100
	---	---	
Subtotal	65.5	70.9	

Table C8 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	
INTRODUCED PERENNIAL GRASSES			
Festuca ovina	3.5	3.8	35
Poa compressa	0.2	0.2	5
Thinopyrum intermedium	2.1	2.3	10
Subtotal	5.8	6.3	
NATIVE PERENNIAL FORBS			
Iva axillaris	1.3	1.4	10
NATIVE SUBSHRUBS			
Artemisia frigida	0.2	0.2	5
NATIVE SHRUBS			
Artemisia tridentata	1.0	1.1	5
Ericameria nauseosus	12.4	13.4	45
Subtotal	13.4	14.5	
Total Plant Cover	92.4	100.0	
Bare Soil	15.4		70
Coarse Fragments	2.5		50
Litter	67.7		100

Table C9. Transect 28, Reach B, 2014, Canopy Coverage and Frequency, Transition Zone, almost wetland. Contamination becoming apparent.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED BIENNIALS			
Melilotus officinalis	0.5	0.5	5
NATIVE PERENNIAL GRASSES			
Deschampsia cespitosa	1.0	1.0	10
Elymus trachycaulus	1.5	1.5	10
Hordeum jubatum	0.4	0.4	10
Juncus balticus	2.5	2.6	25
Puccinellia nuttalliana	4.0	4.1	10
Subtotal	9.4	9.6	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	6.8	6.9	60
Alopecurus arundinaceus	41.2	42.0	90
Subtotal	48.0	48.9	
NATIVE PERENNIAL FORBS			
Symphyotrichum ericoides	0.2	0.2	5
Thermopsis montana	0.9	0.9	5
Subtotal	1.1	1.1	
INTRODUCED FORBS (WEEDS)			
Sonchus arvensis	3.1	3.2	30
Taraxacum officinale	0.2	0.2	10
Subtotal	3.3	3.4	
INTRODUCED LEGUMES			
Lotus corniculatus	32.5	33.2	8
SHRUBS			
Ribes aureum	0.2	0.2	5
Salix exigua	3.0	3.1	25
Subtotal	3.2	3.3	

Table C9 continued	Cover	Relative Cover	Frequency
Total Plant Cover	98.0	100.0	
Bare Soil	0.1		5
Coarse Fragments	---		---
Litter	85.1		100

Table C10. Transect 29, Reach B, 2014, Canopy Coverage and Frequency, Transition Zone. Low-level contamination all around.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
NATIVE PERENNIAL GRASSES			
Deschampsia cespitosa	1.0	1.7	10
Elymus lanceolatus	0.2	0.3	5
Elymus trachycaulus	0.2	0.3	5
Juncus balticus	1.7	2.9	10
	---	---	
Subtotal	3.1	5.2	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	9.1	15.6	50
Alopecurus arundinaceus	26.0	44.4	95
	---	---	
Subtotal	35.1	60.0	
NATIVE PERENNIAL FORBS			
Achillea millefolium	6.5	11.1	25
Thermopsis montana	4.5	7.7	5
	---	---	
Subtotal	11.0	18.8	
INTRODUCED FORBS (WEEDS)			
Cirsium arvensis	0.1	0.2	5
Sonchus arvensis	1.9	3.3	35
Taraxacum officinale	0.1	0.2	5
	---	---	
Subtotal	2.1	3.7	
INTRODUCED LEGUMES			
Trifolium repens	4.9	8.4	35

Table C10 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
SHRUBS			
Salix exigua	1.7	2.9	10
Salix geyeri	0.6	1.0	5
	---	---	
Subtotal	2.3	3.9	
Total Plant Cover	58.5	100.0	
Bare Soil	5.3		40
Coarse Fragments	0.2		15
Litter	83.0		100

Table C11. Transect 30, Reach B, 2014, Canopy Coverage and Frequency, Subirrigated Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
ANNUALS and BIENNIALS			
Melilotus officinalis	1.5	2.2	10
Sisymbrium loeselii	0.3	0.4	5
	---	---	
Subtotal	1.8	2.6	
NATIVE PERENNIAL GRASSES and GRASSLIKE			
Deschampsia cespitosa	0.9	1.4	10
Elymus cinereus	13.1	19.6	30
Elymus lanceolatus	0.5	0.7	5
Elymus trachycaulus	2.1	3.1	25
Juncus balticus	0.5	0.8	10
Pascopyrum smithii	1.2	1.8	15
	---	---	
Subtotal	18.3	27.4	

Table C11 Continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	6.8	10.2	45
Alopecurus arundinaceus	16.0	23.9	45
Festuca ovina	9.6	14.3	30
Poa compressa	0.3	0.5	5
Poa pratensis	1.9	2.8	10
Subtotal	34.6	51.7	
NATIVE PERENNIAL FORBS			
Artemisia dracunculus	3.4	5.1	20
Artemisia ludoviciana	0.2	0.3	5
Symphyotrichum ericoides	0.4	0.6	10
Subtotal	4.0	6.0	
INTRODUCED FORBS (WEEDS)			
Lactuca serriola	0.5	0.8	10
INTRODUCED LEGUMES			
Medicago sativa	6.3	9.4	40
Trifolium repens	0.4	0.6	5
Subtotal	6.7	10.0	
NATIVE SHRUBS			
Chrysothamnus nauseosus	1.0	1.5	10
Total Plant Cover	66.9	100.0	
Bare Soil	12.3		80
Coarse Fragments	4.6		55
Litter	70.8		100

Table C12. Transect 31, Reach C, 2014, Canopy Coverage and Frequency, Subirrigated Zone with Double Organix Compost, Rhizomatous Grasses and Shrub Seeding.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
ANNUALS and BIENNIALS			
Melilotus officinalis	1.5	2.4	10
NATIVE PERENNIAL GRASSES			
Elymus cinereus	7.2	11.4	25
Elymus lanceolatus	5.8	9.2	50
Elymus trachycaulus	3.2	5.1	20
Hordeum jubatum	1.1	1.8	25
Subtotal	17.3	27.4	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	1.5	2.4	20
Alopecurus arundinaceus	13.9	22.1	40
Poa compressa	0.3	0.5	5
Poa pratensis	0.9	1.4	15
Subtotal	16.6	26.4	
NATIVE PERENNIAL FORBS			
Iris missouriensis	0.6	1.0	5
Potentilla anserina	4.8	7.6	10
Ranunculus cymbalaria	0.4	0.6	5
Symphyotrichum sp. (seeded)	7.8	12.4	50
Symphyotrichum ericoides	1.7	2.7	20
Subtotal	15.3	24.3	
INTRODUCED PERENNIAL FORBS			
Taraxacum officinale	0.2	0.3	10
NATIVE SHRUBS			
Artemisia tridentata	0.2	0.3	5
Ericameria nauseosa	11.9	18.9	50
Subtotal	12.1	19.2	
Total Plant Cover	63.0	100.0	
Bare Soil	9.2		70
Coarse Fragments	2.0		50
Litter	78.0		100

Table C13. Transect 32, Reach C, 2014, Canopy Coverage and Frequency, Subirrigated Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
ANNUALS and BIENNIALS			
Melilotus officinalis	0.8	0.7	5
Sonchus asper	23.1	20.4	75
Subtotal	23.9	21.1	
NATIVE PERENNIAL GRASSES			
Elymus cinereus	28.8	25.4	75
Elymus trachycaulus	0.7	0.6	10
Festuca rubra	2.7	2.4	20
Puccinellia nuttalliana	2.0	1.8	5
Subtotal	34.2	30.2	
INTRODUCED PERENNIAL GRASSES			
Agropyron repens	0.2	0.2	5
Agrostis stolonifera	7.2	6.4	65
Alopecurus arundinaceus	11.8	10.4	60
Subtotal	19.2	17.0	
NATIVE PERENNIAL FORBS			
Achillea millefolium	2.6	2.3	25
INTRODUCED LEGUMES			
Lotus corniculatus	33.4	29.5	85
Total Plant Cover	113.3	100.0	
Bare Soil	---		
Coarse Fragments	---		
Plant Litter	84.4		100

TRANSECT 33 was buried by Town Pump fill.

Table C14. Transect 34 and D5, 2014, Canopy Coverage and Frequency, Subirrigated/ Transition Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	
ANNUALS and BIENNIALS			
Melilotus alba & M. officinalis	8.9	8.8	30
Sonchus asper (or *S. arvensis* peren.)	29.6	29.2	85
Subtotal	38.5	38.0	
NATIVE PERENNIAL GRASSES			
Elymus canadensis	0.2	0.2	5
Elymus cinereus	9.2	9.1	40
Elymus trachycaulus	2.2	2.2	20
Festuca rubra	11.8	11.6	40
Hordeum jubatum	0.5	0.5	10
Puccinellia nuttalliana	2.5	2.5	20
Sporobolus airoides	1.2	1.2	10
Subtotal	27.6	27.3	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	0.9	0.9	20
Alopecurus arundinaceus	10.1	10.0	50
Poa compressa	1.7	1.7	10
Subtotal	12.7	12.6	
NATIVE PERENNIAL FORBS			
Achillea millefolium	2.7	2.7	15
Polygonum lapathifolium	0.3	0.3	5
Symphyotrichum ascendens	1.0	1.0	10
Symphyotrichum ciliatum	0.7	0.7	15
Subtotal	4.7	4.7	
INTRODUCED PERENNIAL FORBS (WEEDS)			
Cirsium arvense	0.5	0.5	5
Lepidium latifolium	0.3	0.3	5
Taraxacum officinalis	0.3	0.3	5
Subtotal	1.1	1.1	

Table C14 Continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED LEGUMES			
Lotus corniculatus	9.1	9.0	25
Medicago sativa	5.3	5.2	25
Trifolium pratense	2.3	2.3	5
Subtotal	16.7	16.5	
NATIVE SHRUBS			
Salix exigua	0.1	0.1	5
Total Plant Cover	101.4	100.3	
Bare Soil	5.6		35
Coarse Fragments	0.2		15
Litter	78.6		100

Table C15. Transect 35, Reach C, 2014, Canopy Coverage and Frequency, Transition Zone, Saline.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED BIENNIALS			
Sonchus asper (or *S. arvensis* peren.)	3.0	2.3	5
NATIVE PERENNIAL GRASSES and GRASSLIKE			
Elymus cinereus	26.4	20.2	65
Elymus trachycaulus	2.0	1.5	25
Festuca rubra	0.7	0.5	10
Hordeum jubatum	0.2	0.2	5
Triglochin maritima	0.4	0.3	5
Subtotal	29.7	22.7	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	1.0	0.8	15
Alopecurus arundinaceus	20.6	15.8	80
Bromus inermis	0.5	0.4	5
Subtotal	22.1	17.0	
NATIVE PERENNIAL FORBS			
Iris missouriensis	0.2	0.2	5
INTRODUCED FORBS			
Lotus corniculatus	70.9	54.3	100
Taraxacum officinale	1.2	0.9	15
Subtotal	72.1	55.2	
SHRUBS			
Salix exigua	1.5	1.1	5
Shepherdia argentea	2.0	1.5	5
Subtotal	3.5	2.6	
Total Plant Cover	130.6	100.0	
Bare Soil	---		
Coarse Fragments	---		
Litter	81.3		100

Table C16. Transect 36, 2014, Canopy Coverage and Frequency, Upland Zone, Rock Repository.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%	----------	
INTRODUCED ANNUALS			
Lactuca serriola	0.4	0.7	5
Melilotus officinalis	0.2	0.4	5
Sisymbrium sp.	2.0	3.6	5
Subtotal	2.6	4.7	
NATIVE PERENNIAL GRASSES			
Elymus lanceolatus & E. smithii	0.4	0.7	15
Koeleria macrantha	0.2	0.4	10
Poa juncifolia	2.5	4.5	30
Subtotal	3.1	5.6	
INTRODUCED PERENNIAL GRASSES			
Agropyron cristatum	3.5	6.3	10
Elymus hispidus	20.1	36.4	70
Festuca ovina	8.5	15.4	65
Subtotal	32.1	58.1	
NATIVE FORBS			
Antennaria microphylla	0.4	0.7	10
Artemisia frigida	0.2	0.4	5
Subtotal	0.6	1.1	
INTRODUCED FORBS			
Taraxacum officinale	0.2	0.4	5
INTRODUCED LEGUMES			
Medicago sativa	1.6	2.9	10
SHRUBS			
Chrysothamnus viscidiflorus	10.7	19.4	50
Ericameria nauseosus	4.2	7.6	15
Subtotal	14.9	27.0	
Total Plant Cover	55.1	99.8	

Table C16 continued	Cover	Relative Cover	Frequency
Bare Soil	35.8		100
Coarse Fragments	4.5		100
Litter	46.6		100

Table C17. Transect 37, 2014, Reach C, Canopy Coverage and Frequency, Transition Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
BIENNIALS			
Melilotus officinalis	2.5	2.5	15
NATIVE PERENNIAL GRASSES			
Deschampsia cespitosa	2.5	2.5	20
Elymus trachycaulus	5.5	5.6	40
Festuca rubra	2.7	2.7	20
Hordeum jubatum	1.0	1.0	15
Juncus balticus	0.7	0.7	5
Leymus cinereus	4.0	4.0	25
Subtotal	16.4	16.5	
INTRODUCED PERENNIAL GRASSES			
*Agrostis stolonifera**	20.5	20.7	80
Alopecurus arundinaceus	39.2	39.6	80
Subtotal	59.7	60.3	
NATIVE PERENNIAL FORBS			
Unknown forb	0.1	0.1	10
INTRODUCED PERENNIAL WEEDS			
Sonchus arvensis	2.9	2.9	15
Taraxacum officinale	0.1	0.1	5
Subtotal	3.0	3.0	

* Includes *A. stolonifera* ssp. palustris.

Table C17 Continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%		
INTRODUCED LEGUMES			
Lotus corniculatus	16.9	17.1	50
Medicago sativa	0.5	0.5	10
Subtotal	17.4	17.6	
Total Plant Cover	99.1	100.0	
Bare Soil	1.7		10
Coarse Fragments	0.1		10
Litter	77.6		100

Table C18. Transect 85, Reach J, 2014, Canopy Coverage and Frequency, Subirrigated to Transition Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%		
NATIVE BIENNIALS			
Melilotus officinalis	3.2	4.4	5
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus cinereus	3.7	5.1	35
Elymus smithii	2.0	2.8	20
Elymus trachycaulus	1.8	2.5	60
Juncus balticus	0.7	1.0	5
Puccinellia nuttalliana	33.4	46.0	80
Subtotal	41.6	57.4	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	0.7	0.9	5
Poa compressa	0.3	0.4	5
Subtotal	1.0	1.3	

Table C18 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL FORBS			
Achillea millefolium	3.7	5.1	10
Artemisia frigida	0.4	0.6	5
Plantago eriopoda	0.6	0.8	10
Ranunculus cymbalaria	0.3	0.4	5
Symphyotrichum ascendens	2.7	3.7	40
Subtotal	7.7	10.6	
INTRODUCED PERENNIAL FORBS			
Cirsium arvense	0.5	0.7	15
Taraxacum officinale	0.6	0.8	20
Subtotal	1.1	1.5	
INTRODUCED PERENNIAL LEGUMES			
Lotus corniculatus	2.8	3.9	25
Medicago sativa	13.0	17.9	20
Subtotal	15.8	21.8	
NATIVE SHRUBS			
Artemisia cana	0.5	0.7	5
Ericameria nauseosa	0.6	0.8	5
Salix exigua	0.4	0.5	10
Subtotal	1.5	2.0	
NATIVE TREES			
Fraxinus pensylvanica	0.7	1.0	5
Total Plant Cover	72.6	100.0	
Bare Soil	4.1		25
Coarse Fragments	<0.1		5
Plant Litter	84.7		100

Table C19. Transect 86, Reach J, 2014, Canopy Coverage and Frequency, Subirrigated Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus cinereus	14.6	15.6	75
Elymus lanceolatus	0.7	0.8	5
Elymus smithii	0.5	0.4	5
Elymus trachycaulus	6.6	7.1	60
Hordeum jubatum	0.5	0.5	10
Pseudoroegneria spicata	0.7	0.8	5
Puccinellia nuttalliana	6.1	6.5	40
Subtotal	29.7	31.7	
INTRODUCED PERENNIAL GRASSES			
Poa compressa	3.0	3.2	30
NATIVE PERENNIAL FORBS			
Achillea millefolium	0.4	0.4	10
Artemisia frigida	2.1	2.2	25
Artemisia ludoviciana	<0.1	<0.1	5
Symphyotrichum ascendens	3.0	3.2	30
Symphyotrichum ciliatum	3.2	3.4	15
Symphyotrichum ericoides	0.2	0.2	5
Subtotal	8.9	9.4	
INTRODUCED PERENNIAL FORBS			
Taraxacum officinale	0.3	0.3	10
INTRODUCED PERENNIAL LEGUMES			
Lotus corniculatus	5.0	5.3	10
Medicago sativa	45.7	48.8	70
Trifolium repens	0.2	0.2	5
Subtotal	50.9	54.3	

Table C19 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE SHRUBS			
Artemisia cana	0.5	0.5	15
Ericameria nauseosa	0.3	0.3	5
Subtotal	0.8	0.8	
Total Plant Cover	93.6	100.0	
Bare Soil	2.8		50
Coarse Fragments	0.2		25
Plant Litter	80.8		100

Table C20. Transect 87, Reach J, 2014, Canopy Coverage and Frequency, Subirrigated Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE BIENNIALS			
Melilotus officinalis	0.3	0.3	5
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus cinereus	20.6	19.4	60
Elymus lanceolatus	1.6	1.6	25
Elymus smithii	0.1	0.1	5
Elymus trachycaulus	0.2	0.2	5
Koeleria macrantha	5.3	5.0	60
Pseudoroegneria spicata	0.5	0.4	5
Subtotal	28.3	26.7	
INTRODUCED PERENNIAL GRASSES			
Festuca ovina	3.8	3.6	40
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	62.7	59.1	100

Table C20 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
NATIVE SUBSHRUBS			
Artemisia dracunculus	2.4	2.3	15
Artemisia frigida	4.7	4.4	55
Subtotal	7.1	6.7	
NATIVE SHRUBS			
Artemisia tridentata	0.5	0.5	10
Ericameria nauseosa	3.3	3.1	40
	3.8	3.6	
Total Plant Cover	106.0	100.0	
Bare Soil	5.7		55
Coarse Fragments	0.8		50
Plant Litter	78.0		100

Table C21. Transect 88, Reach J, 2014, Canopy Coverage and Frequency, Upland to Subirrigated Zone, CO 25 South of BN Line.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus cinereus	45.8	39.9	90
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	35.0	30.5	65
NATIVE SUBSHRUBS			
Artemisia dracunculus	4.1	3.6	30
Artemisia frigida	0.2	0.2	5
Artemisia ludoviciana	0.5	0.4	10
Subtotal	4.8	4.2	
NATIVE SHRUBS			
Artemisia cana	16.4	14.3	65

Table C21 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
Artemisia tridentata	12.8	11.1	65
	---	---	
	29.2	25.4	
Total Plant Cover	114.8	100.0	
Bare Soil	--		--
Coarse Fragments	--		--
Plant Litter	84.0		100

Table C22. Transect 89, Reach J, 2014, Canopy Coverage and Frequency, Upland to Subirrigated Zone, CO 25 South of BN Line. Too thick to see but a few feet.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%----------		
INTRODUCED ANNUALS			
Sisymbrium loeselii	3.7	2.4	25
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus cinereus	80.7	53.0	100
INTRODUCED PERENNIAL GRASSES			
Poa compressa	0.9	0.6	5
NATIVE PERENNIAL FORBS			
Achillea millefolium	2.8	1.8	20
INTRODUCED PERENNIAL FORBS			
Taraxacum officinale	2.0	1.3	10
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	61.7	40.5	100
NATIVE SHRUBS			
Artemisia cana	0.2	0.1	5
Ericameria nauseosa	0.2	0.1	5
	---	---	
Subtotal	0.4	0.2	

Table C22 continued	Cover	Relative Cover	Frequency
Total Plant Cover	152.2	99.8	
Bare Soil	--		--
Coarse Fragments	--		--
Plant Litter	80.2		100

Table C23. Transect 90, Reach J, 2014, Canopy Coverage and Frequency, Upland to Subirrigated Zone, Grazing Mix, North of Rarus Line. Hayed on Hazlet property.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%	----------	
INTRODUCED ANNUALS			
Bassia scoparia	0.3	0.2	5
Sisymbrium loeselii	0.2	0.1	5
	---	---	
Subtotal	0.5	0.3	
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus lanceolatus	1.0	0.8	5
Elymus repens	0.5	0.4	5
Elymus trachycaulus	4.7	3.6	40
Pascopyrum smithii	2.9	2.2	10
	---	---	
Subtotal	9.1	7.0	
INTRODUCED PERENNIAL GRASSES			
Agropyron cristatum	1.2	0.9	20
Agrostis stolonifera	0.2	0.1	5
Thinopyrum intermedium	32.4	24.6	95
	---	---	
Subtotal	33.8	25.6	
NATIVE PERENNIAL FORBS			
Artemisia frigida	0.2	0.2	5
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	88.1	66.9	100

Table C23 continued	Cover	Relative Cover	Frequency
Total Plant Cover	131.7	100.0	
Bare Soil	7.2		10
Coarse Fragments	0.7		10
Plant Litter	73.9		100

Table C24. Transect 93, Reach K, 2014, Canopy Coverage and Frequency, Subirrigated Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Elymus canadensis	1.0	0.7	5
Elymus lanceolatus	0.2	0.2	5
Elymus smithii	0.2	0.1	5
Elymus trachycaulus	0.6	0.4	5
Poa juncifolia var. ampla	30.4	21.3	100
Pseudoroegneria spicata	0.2	0.1	5
Puccinellia nuttalliana	3.3	2.3	20
Subtotal	35.9	25.1	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	0.1	0.1	5
NATIVE PERENNIAL FORBS			
Achillea millefolium	5.2	3.6	65
Artemisia frigida	9.3	6.5	85
Artemisia ludoviciana	3.8	2.7	75
Subtotal	18.3	12.8	
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	87.0	60.9	100
Trifolium repens	1.0	0.7	5
Subtotal	88.0	61.6	
NATIVE SHRUBS			
Artemisia cana	0.2	0.1	5
Aremisia tridentata	0.4	0.3	20
Subtotal	0.6	0.4	

Table C24 continued

Total Plant Cover	142.9	100.0	
Bare Soil	9.2		65
Coarse Fragments	2.4		70
Plant Litter	72.2		100

Table C25. Transect 94, Reach K, 2014, Canopy Coverage and Frequency, Subirrigated Zone with a little Upland and Transition-Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Deschampsia cespitosa	2.2	2.2	15
Elymus trachycaulus	1.0	1.0	10
Festuca rubra	2.5	2.5	15
Hordeum jubatum	0.8	0.8	15
Poa juncifolia var. ampla	3.4	3.4	30
Subtotal	9.9	9.9	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	2.5	2.5	15
Alopecurus arundinaceus	13.1	13.1	45
Poa compressa	6.7	6.7	25
Subtotal	22.3	22.3	
NATIVE PERENNIAL FORBS			
Achillea millefolium	0.1	0.1	5
Mentha arvensis	0.7	0.7	10
Plantago eriopoda	0.1	0.1	5
Subtotal	0.9	0.9	
INTRODUCED PERENNIAL LEGUMES			
Lotus corniculatus	1.9	1.9	5
Medicago sativa	60.3	60.2	100
Trifolium repens	2.0	2.0	5
Subtotal	64.2	64.1	

Table C25 continued

NATIVE SHRUBS			
Salix boothii	2.0	2.0	10
Salix geyeri	0.8	0.8	5
Subtotal	2.8	2.8	
Total Plant Cover	100.1	100.0	
Bare Soil	8.6		40
Coarse Fragments	1.5		35
Plant Litter	76.3		100

Table C26. Old Transect 4-2, Reach R, 2014, Canopy Coverage and Frequency, Upland Zone, Stimson Wood Product Amended Area. (n=18)

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED ANNUAL GRASSES			
Bromus tectorum	0.2	0.5	11
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Achnatherum hymenoides	0.3	0.7	6
Elymus lanceolatus	1.9	4.5	39
Pseudoroegneria spicata	0.6	1.4	6
Subtotal	2.8	6.6	
INTRODUCED PERENNIAL GRASSES			
Festuca ovina	4.6	11.0	67
NATIVE PERENNIAL FORBS			
Centaurea maculosa	0.6	1.4	6
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	28.7	68.7	100
NATIVE SHRUBS			
Artemisia dracunculus	3.6	8.7	28
Artemisia ludoviciana	0.6	1.4	17
Subtotal	4.2	10.1	

Table 26 continued

Ericameria nauseosa	0.7	1.7	22	
Total Plant Cover	41.8	100.0		
Bare Soil	14.1		100	
Coarse Fragments	22.7		100	
Plant Litter	49.2		100	

Table C27. Old Transect 4-1, Reach S, 2014, Canopy Coverage and Frequency, Subirrigated-Transition Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Deschampsia cespitosa	2.4	4.2	20
Elymus canadensis	1.5	2.6	25
Elymus cinereus	2.1	3.6	15
Elymus lanceolatus	2.0	3.5	25
Elymus trachycaulus	0.7	1.2	10
Pascopyrum smithii	1.3	2.3	20
Subtotal	10.0	17.4	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	36.2	62.8	85
Poa compressa	0.3	0.5	15
Subtotal	36.5	63.3	
NATIVE PERENNIAL FORBS			
Epilobium ciliatum	0.5	0.9	15
Symphyotrichum ericoides	0.1	0.2	5
Subtotal	0.6	1.1	
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	2.3	4.0	15
NATIVE SHRUBS			
Artemisia dracunculus	3.0	5.2	15
NATIVE SHRUBS			
Artemisia cana	5.2	9.0	30

Table C27 continued

Total Plant Cover	57.6	100.0	
Bare Soil	4.2		60
Coarse Fragments	10.4		35
Plant Litter	73.1		100

Table C28. Transect 4-40, Reach S, 2014, Canopy Coverage and Frequency, Upland Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	----------%	----------	
INTRODUCED ANNUALS			
Bassia scoparia	50.0	57.7	100
Sisymbrium loeselii	1.0	1.2	5
	---	---	
	51.0	58.9	
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Achnatherum hymenoides	4.8	5.5	45
Elymus cinereus	9.5	11.0	45
Elymus lanceolatus	3.6	4.2	40
Elymus trachycaulus	2.5	2.9	40
Heterostipa comata	0.2	0.2	5
Poa glaucifolia	0.3	0.4	5
Poa juncifolia var. *ampla*	11.1	12.8	75
Pseudoroegneria spicata	0.8	0.9	10
	-- ----	------	
Subtotal	32.8	37.9	
NATIVE PERENNIAL FORBS			
Artemisia ludoviciana	1.4	1.6	20
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	1.2	1.4	15
NATIVE SHRUBS			
Artemisia tridentata	0.2	0.2	5
Total Plant Cover	86.6	100.0	
Bare Soil	15.6		85
Coarse Fragments	4.2		85
Plant Litter	70.2		100

Table C29. Transect 4-41, Reach S, 2014, Canopy Coverage and Frequency, Upland Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
INTRODUCED ANNUALS			
Bassia scoparia	19.3	28.3	100
Sisymbrium loeselii, S. altissimum	13.0	19.0	35
Subtotal	32.3	47.3	
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Achnatherum hymenoides	15.5	22.7	95
Elymus lanceolatus	7.3	10.8	70
Elymus smithii	1.7	2.5	20
Elymus trachycaulus	0.5	0.7	15
Heterostipa comata	0.8	1.2	20
Koeleria macrantha	0.1	0.2	5
Poa juncifolia var. *ampla*	3.1	4.5	30
Pseudoroegneria spicata	0.7	1.0	15
Subtotal	39.2	43.6	
NATIVE PERENNIAL FORBS			
Artemisia ludoviciana	1.6	2.3	50
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	4.4	6.4	60
NATIVE SHRUBS			
Ericameria nauseosa	0.3	0.4	5
Total Plant Cover	68.3	100.0	
Bare Soil	56.3		100
Coarse Fragments	5.5		100
Litter	70.2		100

Plant

Table C30. Transect 4-42, Reach S, 2014, Canopy Coverage and Frequency, Transition Zone.

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	%
NATIVE ANNUAL FORBS			
Cleome serrulata	0.2	0.2	5
INTRODUCED ANNUALS			
Bassia scoparia	33.6	32.3	85
Sisymbrium loeselii, S. altissimum	8.5	8.2	20
Subtotal	42.1	40.5	
NATIVE PERENNIAL GRASSES AND GRASSLIKE			
Achnatherum hymenoides	4.0	3.9	45
Elymus cinereus	9.6	9.2	50
Elymus lanceolatus	6.0	5.8	50
Elymus trachycaulus	8.0	7.7	45
Juncus arcticus	4.5	4.3	10
Koeleria macrantha	3.5	3.4	25
Pascopyrum smithii	4.2	4.0	40
Poa juncifolia var. *ampla*	8.1	7.8	65
Pseudoroegneria spicata	0.5	0.5	5
Sporobolus airoides	0.2	0.2	5
Subtotal	48.6	46.8	
INTRODUCED PERENNIAL GRASSES			
Agrostis stolonifera	5.0	4.8	10
NATIVE PERENNIAL FORBS			
Artemisia frigida	0.5	0.5	20
Potentilla anserine	1.9	1.8	10
Subtotal	2.4	2.3	
INTRODUCED PERENNIAL FORBS			
Cirsium arvense	0.5	0.5	5
INTRODUCED PERENNIAL LEGUMES			
Medicago sativa	5.0	4.8	35

Table C30 continued

SPECIES	AVERAGE COVER	RELATIVE COVER	FREQUENCY
	%	%	
NATIVE SHRUBS			
Artemisia tridentata	<0.1	<0.1	5
Atriplex canescens	0.1	0.1	5
Subtotal	0.1	0.1	
Total Plant Cover	103.9	100.0	
Bare Soil	14.6		80
Coarse Fragments	6.1		75
Plant Litter	67.5		100

APPENDIX L

SOIL MONITORING PHOTOS

APPENDIX L
SOIL SAMPLING PHOTOS

Figure L1. Soil sample SBC-1 midway down Reach A visually suggested impaired dirt and salts with tolerant grasses. pH was neutral, but EC was 3.5 dS/m. Total Mn was 5,450 ppm and Zn was 2,120 ppm. [Cu + Mn + Zn] was 8,400 ppm. This area is not currently scheduled for repair.

Figure L2. Different parts of SBC-2 south of the creek in upper Subarea 1. It appeared more contaminated than SBC-1 however metals are lower: Cu was 1,070 ppm and Zn and Mn were 1,150 ppm each. pH was around 5.

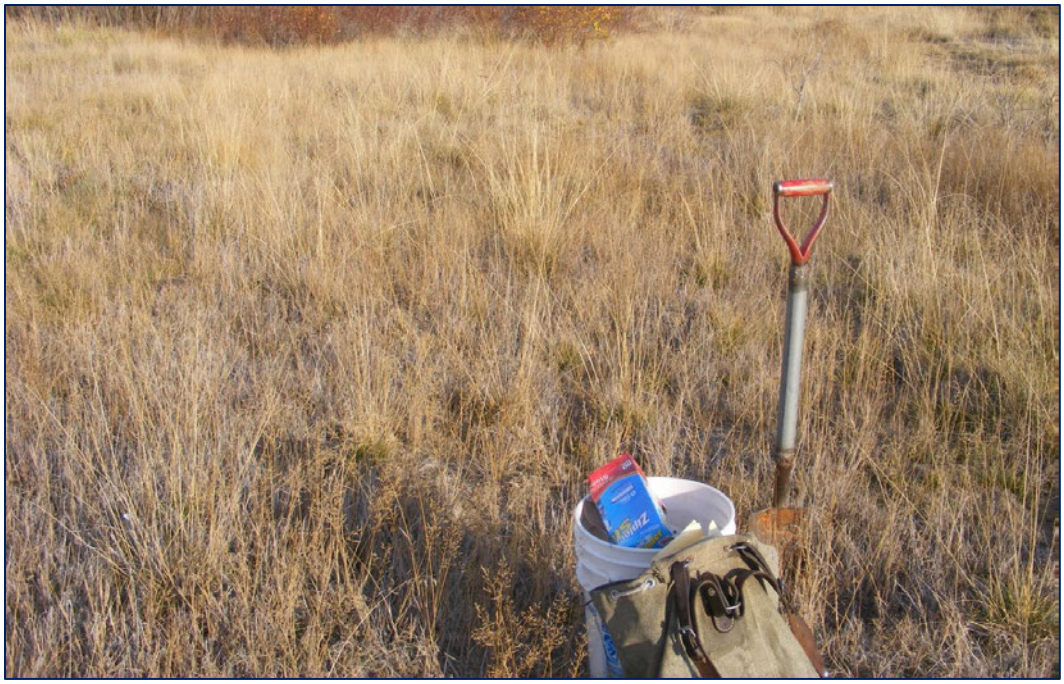

Figure L3. SBC-3 has the same adapted grasses present that were present pre-remediation. [Cu + Mn +Zn] was slightly above 3,000 ppm. Site is in upper Subarea 1 south of the creek.

Figure L4. This upland site (SBC-4) in upper Subarea 1 had been seeded many times. It is a granitic in situ knoll that was graded. The main limitation here appears to be physical. Particle size is 91% sand and just 2% clay. Cu and Zn concentrations were higher in the second 0.5 feet.

Figure L5. SBC-5 appeared similar to SBC-3. Site is somewhat acidic (pH 5.6) and [Cu + Mn +Zn] is 4,360 ppm. Liming may help but some plant impairment would likely remain.

Figure L6. Detail at SBC-6. This wetland defied seeding and is dominated by redtop, a metal-tolerant grass and facultative wetland species.

Figure L7. SBC-6 was a seasonal wetland in northern Phase 1 west of the creek and just north of the big transmission line. SBC-6 appeared contaminated but metals were relatively low and pH was about 6. Texture was sand.

Figure L8. SBC-7 was rocky, sandy dirt. Site is alkaline, non-saline, and [Cu + Mn + Zn] was approximately 500 ppm.

Figure L9. SBC-8 has redtop and is much drier than SBC-6. SBC-8 was an unremediated spot under the power line. [Cu + Mn +Zn] was 10,600 ppm. pH is neutral. Redtop is broadly adapted.

Figure L10. At SBC-9 in old Phase 1 (SW Reach R), the substrate appears to have no chemical problems but vegetation is unlikely to grow due to the rocky sandy soil. On the other side of the creek, 6% OM was added from a waste wood product. Apparently this addition resulted in weed proliferation including Dalmatian toadflax. Alfalfa seeding may improve conditions.

Figure L11. Unremediated site SBC-10 in Phase 1. pH was 6 and [Cu + Mn +Zn] was 2,235 ppm at pH 5. Plants included narrowleaf willow and redtop.

Figure L12. SBC-11 was also unremediated. Presence of saltgrass indicates a veneer of tailings over dirt. [Cu + Mn +Zn] was 13,000 ppm at pH 6.

Figure L13. SBC-12 (in Reach G, Subarea 2), had sparse revegetation suggesting residual contamination. The upper 0.5 feet had [Cu = Mn + Zn] of 920 ppm. Soil was moderately saline to saline. In the lower 0.5 feet [Cu = Mn + Zn] was 3,875 ppm.

Figure L14. SBC-13 has abundant sheep fescue but it is unclear why shrub mortality appears to be variable at this site. Residual contamination may be the cause however metal concentrations were low in the upper 0.5 feet. Mortality may be due to shallow groundwater because there is a pond nearby. Rabbitbrush and big sagebrush prefer dry conditions.

Figure L15. Vegetation impairment is somewhat subtle at SBC-15. There is no alfalfa, some redtop, rabbitbrush appeared stressed, some dead grass, and mainly sheep fescue remaining. Cause does not appear to be contamination or acidity. EC was 6 dS/m throughout the upper foot of soil.

Figure L16. Some willows and rabbitbrush but a depauperate understory south of Nissler pond and uphill of some obvious contamination at SBC-16. pH and EC were moderate; [Cu + Mn + Zn] was 4,000 ppm.

Figure L17. SBC-18 is now mainly a variety of redtop (lower photo). [Cu + Mn + Zn] was 1,030 ppm but the main limitation appeared to be that the soil was saline with EC >8 dS/m. In 2005, EC was 12 dS/m.

Figure L18. At SBC-19 near the creek in Reach C, mortality of creeping meadow foxtail, an invader grass, was high. Cause of mortality is unknown.

Figure L19. SBC-20 has large creeping meadow foxtail but high mortality and more standing litter than live plants. pH was relatively neutral and metals concentrations were relatively low. EC (3 dS/m) was within the tolerance of this grass. It appears the litter may be suppressing new growth.

Figure L20. SBC-21 has plant litter and few live plants. [Cu + Mn + Zn] was 8,830 ppm; primarily Mn. pH was relatively neutral but EC was about 4 dS/m.

Figure L21. SBC-22, in Reach A south of the stream, had dead plants where sampled. Soil was slightly saline, neutral, and somewhat contaminated. [Cu + Mn + Zn] was 2,040.

Figure L22. SBC-23 is vegetated but [Cu + Mn + Zn] was 10,000 ppm. pH was neutral and salinity was low. Presence of tufted hairgrass and wet conditions mask severity of contamination.

Figure L23. SBC-24 had [Cu + Mn + Zn] of 32,000 ppm in the upper 0.5 feet and 56,000 ppm in the lower 0.5 feet. Most of the tufted hairgrass was dead. Water was encountered one foot down. Repair was located behind. Site appeared to be in situ material below an old seep.

Figure L24. SBC-25 had mostly dead creeping meadow foxtail. Site was vegetated recently. [Cu + Mn + Zn] was 4,400.

Figure L25. Sheep fescue and rabbitbrush. [Cu + Mn + Zn] was 3,000.

Figure L26. The general appearance of Reach C appears good despite residual contamination.

Figure L27. SBC-27 had [Cu + Mn + Zn] of 10,300 ppm in the upper 0.5 feet and 36,000 in the lower 0.5 feet. pH was neutral. EC was 4 dS/m.

Figure L28. SBC-28 was a redtop community. Redtop is a widespread grass and may denote contaminated or salty conditions. pH was neutral and salinity was moderate. [Cu + Mn + Zn] was 11,500 in the upper 0.5 feet.

APPENDIX M

MISCELLANEOUS PHOTOS

APPENDIX M
MISCELLANEOUS PHOTOS

Figure M1. *Cladophora* at a pond near the Port of Butte. *Cladophora* is prevalent at most ponds and in Silver Bow Creek.

Figure M2. Scentless false mayweed *Matricaria maritima* near Silver Bow Creek.

Figure M3. Beavers activity in Reach B, spring 2014.

Figure M4. Reach M bank construction detail in May and June. Abundant volunteers on lower lip.

Figure M5. Reach M meadow lacks alfalfa which often dominates (it may have been left out of the seed mix). Streambanks had flooded and therefore are packed with seeded plants and redtop, the latter from overflow waters. Low streambanks are beneficial.

Figure M6. The old road parallel to German Gulch demonstrates successful broadcast seeding.

Figure M7. Garter snake in lower German Gulch slope seeding.

Figure M8. Greenway trailside Reach C.

Figure M9. Large weeds in Greenway parking lot, Reach B.

Figure M10. Annual litter, Reach S, March 2014. Kochia on-site spread throughout the seeding.

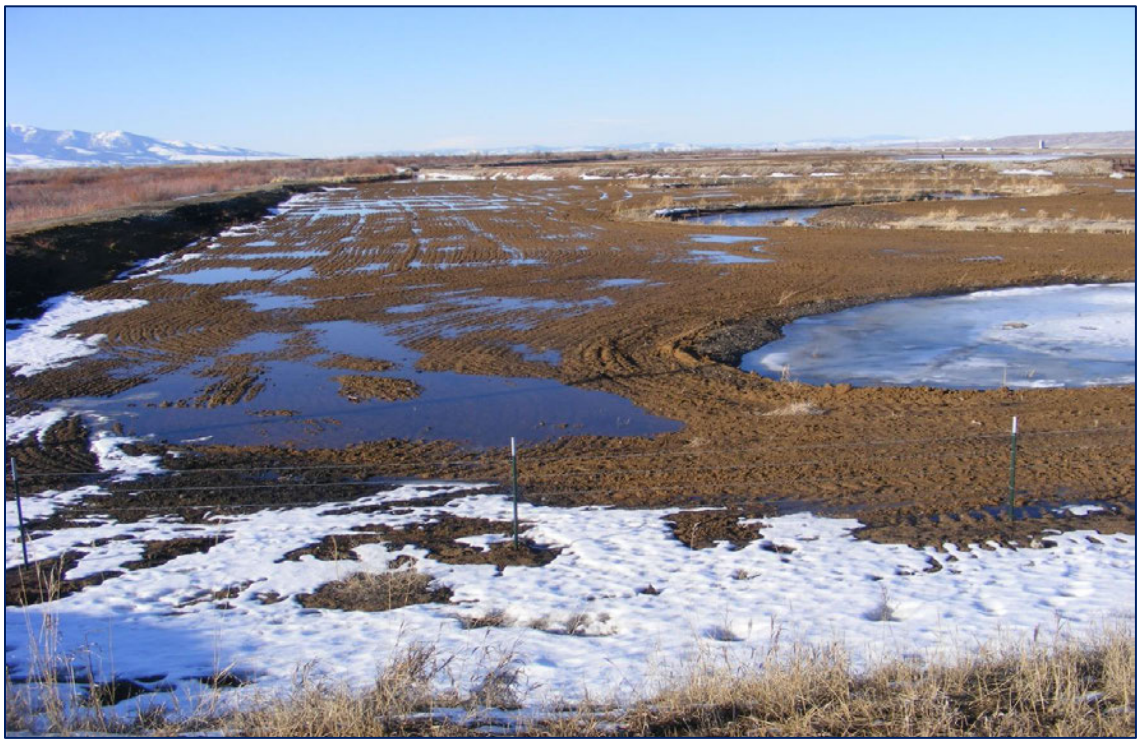

Figure M11. Reach T snowmelt on frozen ground, March 2014.

Figure M12. Shrub collection in Reach S south of the horseshoe wetland. Species present include tarragon, silver sagebrush, cudweed sage, and rabbitbrush all from hand-seeding.

Figure M13. Blue western aster (rear) was seeded. White plant (foreground) is either white prairie aster or white heath aster, likely a volunteer which is relatively salt tolerant. Reach J in August or September 2014.

Figure M14. Small spot in Reach P with four seedlings in the sagebrush genus: cudweed sage, fringed sagewort, silver sagebrush, and big sagebrush.

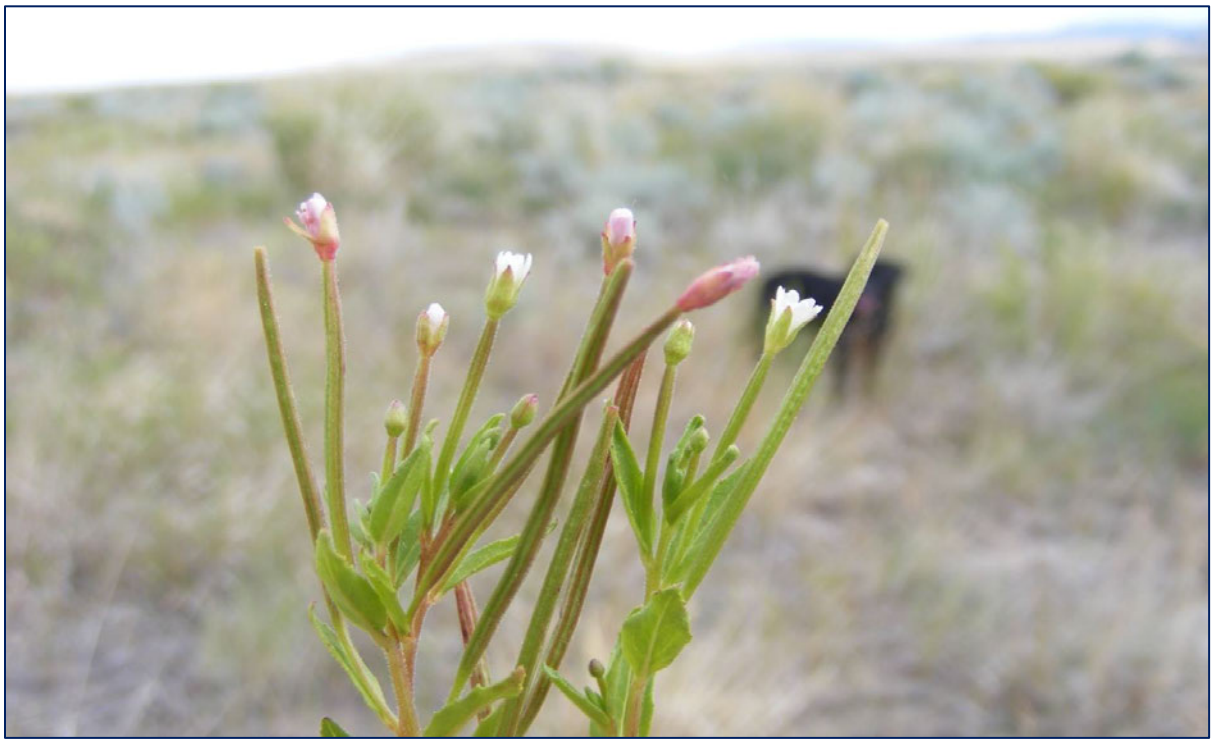

Figure M15. *Epilobium ciliatum* fringed willow herb (fireweed genus) is a common wet site volunteer along Silver Bow Creek and other wetlands.

Figure M16. Two examples of the upper old channel (, Reach P, that SBC moved back into in 2010 and 2011. The rocky channel without coversoil was hand-seeded.

Figure M17. Grass, legume, and willow detail in old straight stream channel, Reach P.

Figure M18.Reach P: upper photo is hand-seeded, reconstructed streambank. Willows and redtop in lower photo were natural recruits.

Figure M19. Abundance of sagebrush in spring, Reach L. By August, no sagebrush was visible beneath the alfalfa canopy. Sagebrush unlikely to survive when covered by alfalfa for several years.

Figure M20. Canada geese near Sheep Gulch Pond.

Figure M21. Shrubs at Sheep Gulch pond: upland rabbitbrush in foreground, green shrubs behind geese are green buffaloberries and willows.

APPENDIX N

VEGETATION MONITORING FIELD NOTES

APPENDIX N
VEGETATION MONITORING FIELD NOTES

REACHES B AND C

T19b. Unseeded Garrison creeping meadow foxtail has become the most abundant species, but two legumes (bird's-foot trefoil and white clover) are also important, as is narrowleaf willow. This is one of few transects where plant cover increased since 2010. The main changes since 2010 are more creeping meadow foxtail (a very aggressive exotic grass seeded in LAO) and bird's-foot trefoil. Slender wheatgrass and basin wildrye declined in the face of creeping foxtail. Many shrubs are present, mainly willows. At this point, individual narrowleaf willow plants cannot be distinguished or counted. Areas of poor soil are present.

T19b	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Salix bebbiana			200	100
Salix exigua		several thousand		
Shepherdia argentea		200	100	

Total several thousand/ha

T20. Hydrology appeared to be more subirrigated than transition zone. Perennial plant cover was the same in 2010 and 2014 (94-95%). Species composition was similar to T19b with creeping meadow foxtail, bird's-foot trefoil, white clover, and redtop dominating along with narrowleaf willow. The main compositional changes from 2010 are more willows, creeping meadow foxtail, and redtop in conjunction with less slender wheatgrass, and basin wildrye. A repair area occurs at about the 10-meter point along this transect.

T20	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Salix bebbiana			300	100
Salix boothii	100		300	
Salix exigua			300	200

Total 1,300/ha

T21. Hydrology is subirrigated. Some soils are poor. The remaining aspens never grew and are barely alive. Perennial plant cover is still 78%, down 10% from 2010. The main species are white clover, basin wildrye, creeping meadow foxtail (it's a bit dry for this grass), Canada bluegrass, and alfalfa. Compared to 2010, there is less slender wheatgrass, basin wildrye, and bird's-foot trefoil, and at the same time more introduced grasses. Shrubs and trees follow.

T21	0-25 cm	26-50 cm	50-75cm	75-100+
	----------individuals/hectare----------			
Ericameria nauseosa		600	200	500
Populus tremuloides			200	
Total	1,500/ha			

T22. This is a mostly repaired upland that now has a clean but rocky substrate. It supports just 36% perennial plant cover. Bare soil is nearly 50%. I should overseed it. While diversity is good, only Russian wildrye, which was the main grass before repair, is abundant. The shrub picture is rosier, although they remain small. A little fertilizer would help.

T22	0-25 cm	26-50 cm	50-75cm	75-100+
	----------individuals/hectare----------			
Artemisia tridentata	2,300	1,500		
Ericameria nauseosa	1,200	600	100	
Total	5,700/ha			

T23. I must have lost the sample data or more likely missed this transect, as I have no photo either.

T24. This subirrigated area experienced a big decline in perennial plant cover from 93% in 2010 to 66% in 2014. There is some contamination at the west end, and the final plot was barren. In 2010, the most prevalent species were slender wheatgrass and basin wildrye among grasses and alfalfa and white clover among legumes. In 2014, basin wildrye was the main grass and white clover the main legume with creeping meadow foxtail coming on, but the site is on the dry end of its habitat requirement.

T24	0-25 cm	26-50 cm	50-75cm	75-100+
	----------individuals/hectare----------			
Ericameria nauseosa			600	600
Ribes aureum				100
Total	1,300/ha			

T25. T25 is a subirrigated transect that crosses the pipeline disturbance. Pipeline backfilling sometimes inverted the dirt profile, resulting in surface contamination. In other places, thick surface litter may limit primary production. Perennial cover declined from 108% in 2010 (very good for a subirrigated site) to 87% in 2010. Wildryes and slender wheatgrass and white clover were codominant in 2010, whereas our introduced invader from LAO, Garrison creeping meadow foxtail, was #1 in 2014 with white clover and bird's-foot trefoil subdominant.

T25	0-25 cm	26-50 cm	50-75cm	75-100+
	----------individuals/hectare----------			
Ericameria nauseosa		1,000	100	200
Salix exigua		around 20,000 uncounted		

Total Around 20,000/ha

T26. This sample represents an upland with local contamination from the pipeline (see T25). Perennial cover is down more than 10% from 2007 and 2010. Russian wildrye was dominant then as it is now. Part of this area was used for compost storage, so reverse fertilization could partially account for the decline. Somewhat surprisingly, there are some shrubs, probably the result of repeated adjacent "road" seedings.

T26	0-25 cm	26-50 cm	50-75cm	75-100+
	----------individuals/hectare----------			
Artemisia cana	500	1,400	900	
Artemisia tridentata	200			
Ericameria nauseosa	200	800	300	100

Total 4,400/ha

T27. Cover remained the same 2010-2014, about 85%. Species composition was similar in both years, but basin wildrye became more dominant while thickspike wheatgrass and some others diminished. In 2014, basin wildrye accounted for two-thirds of relative cover. One can still see compost on the ground surface here.

T27	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Artemisia tridentata	100			
Ericameria nauseosa	1,500	100	900	100

Total 2,700/ha

T28. Combined perennials and the main species, Garrison creeping meadow foxtail, decreased rather slightly from 2010 to 2014, probably because some additional contamination is visible. The #2 species, bird's-foot trefoil, increased. The east end is almost a wetland, and beavers have harvested some woodies there. Transition-zone T28 had 46% cover of Garrison creeping meadow foxtail in 2010 and 41% in 2014.

T28	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Salix bebbiana		200		
Salix boothii	100			
Salix exigua		400	1,500	100
Total	2,300/ha			

T29. While there were no data from 2010 for comparison, perennial cover in 2007 was 96% but only 56% in 2014. This is below the performance standard of 80%. Unseeded Garrison creeping meadow foxtail was the main species. My field notes indicate contaminated spots all around, mostly low-level contamination.

T29	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Ericameria nauseosa		100		
Salix boothii		100	100	
Salix exigua			200	100
Salix geyeriana			200	
Total	800/ha			

T30. T30 in an area of subirrigated hydrology features two codominant grasses: basin wildrye (native origin) and creeping meadow foxtail (introduced from N. Europe). Perennial plant cover reduced from 83% in 2010 to 65% in 2014 (Table 3). Many contaminated spots are visible; most were also present four years ago. The shrubs are all in the eastern portion of the transect.

T30	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Artemisia tridentata		100		
Ericameria nauseosa	400	1,400	300	
Total	2,200/ha			

The remaining transects (below) are in Reach C.

T31. This is one of the places receiving twice the normal amount of compost; compare to T32, also subirrigated. Compost is still visible on the ground surface in the eastern portion. Diversity is good. The two main species in 2014 were rubber rabbitbrush and creeping meadow foxtail, but the site overall is too dry for the latter to become as abundant as in moister habitat. The west end is moister and more productive. The shrubs are in the eastern half – like a wall. Something like 30% of rabbitbrush (east end) is dying. Perennial cover was 61% in 2014, just meeting the performance standard, but it was 78% in 2010.

T31	0-50 cm	51-100	100 + cm
	----------individuals/hectare----------		
Artemisia tridentata	200		
Ericameria nauseosa	1,400	5,900	1,000
Total	8,500/ha		

T32. T32 in Reach C is a subirrigated site where perennial plant cover increased since 2010. Bird's-foot trefoil and basin wildrye are codominant, but an annual sowthistle is almost as abundant. I sampled from east to west for better light for the photograph. Shrubs were few.

T32	0-50 cm	51-100	100 + cm
	----------individuals/hectare----------		
Rosa woodsii	200	200	
Total	400/ha		

T33. I can't find the data for this transect, which received twice the normal amount of BioLogic compost.

T34. This dog-leg transect is in both the subirrigated zone and the transition zone. This year it appeared mostly transition zone. Total plant cover was about 100%, but due to annual weeds and reduction in native grasses, perennial cover dropped to just 62% in 2014 compared to 80% in 2010. A sowthistle provided 30% cover that did not count toward meeting the standard. Native grasses were much reduced. In sum, total plant cover is high but some form of impairment has manifested, resulting in weeds at the expense of the perennials previously prominent. The few remaining aspens are about the same size as when planted more than one decade ago.

T34	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Populus tremuloides		300		
Salix exigua	200			
Sarcobatus vermiculatus		100		
Shepherdia argentea	100			
Symphoricarpos occidentalis	200			
Total	900/ha			

T35. The area represented by this transect is productive but not diverse. One of the grasses accounting for high productivity was and is basin wildrye, which by coincidence had identical

canopy coverage in 2010 and 2014 (26.4%). The unseeded, introduced grass creeping meadow foxtail is equally important, more so in moister soils. But bird's-foot trefoil dominates, providing more than half of relative cover.

T35	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Salix exigua			800	100
Shepherdia argentea		200		
Total	1,100/ha			

T36. This is the rock repository, a very dry site. Relative to 2010, shrubs are up, but native grasses are down. Perennial cover is low, but at the same time it represents a practical maximum for coarse soils on a warm aspect. Pubescent wheatgrass is dominant, rubber rabbitbrush subdominant.

T36	0-25 cm	26-50 cm	50-75cm	75-100+
	----------individuals/hectare----------			
Artemisia tridentata	100			100
Chrysothamnus viscidiflorus	900	5,700	300	
Ericameria nauseosa	100	100	100	
Total	7,300/ha			

T37. A moist but salty and probably sodic soil dominated by two introduced grasses, creeping meadow foxtail and redtop.

T37	0-50 cm	51-100	100-150 cm	150+ cm
	----------individuals/hectare----------			
Ribes aureum		100	200	
Salix exigua		300		
Shepherdia argentea		100		100
Total	800/ha			

REACH J

T85. This is a dog-leg transect by an apparently contaminated pond, the margin vegetation of which is slowly improving from the previous barren strip. Hydrology is Subirrigated to Transition Zone. In 2011, I said it was in "the alkaligrass zone," and alkaligrass still accounts for almost half of relative cover in 2014 – but it was 80% of relative cover three years ago. The following shrubs were tallied along the transect; rubber rabbitbrush increased most, and narrowleaf willow seemingly came out of nowhere (but probably vegetative spread from nearby parents).

T85	0-25 cm	26-50 cm	51-75 cm	100-150
	----------individuals/hectare----------			
Artemisia cana	800	100		
Betula occidentalis		100		
Ericameria nauseosa	100	500	500	
Fraxinus pennsylvanica			200 died back	
Salix exigua	700		400	200
Shepherdia argentea				100
Total	3,700/ha			

T86. I had to move this transect, but I didn't note why. It continues to have subirrigated hydrology. The soil in places is poor (but not apparently contaminated) and won't grow many shrubs there. Alfalfa and basin wildrye are the two main species, same as before. Three species of aster (mostly unseeded) were sampled. Shrubs are far fewer than in 2011 on the old transect. I did note at that time that I expected some shrub mortality to ensue.

T86	0-25 cm	26-50 cm	51-75 cm	75-100
	----------individuals/hectare----------			
Artemisia cana	1,800			
Ericameria nauseosa	1,000	500	100	
Total	3,4000/ha			

T87. This transect appears to cross two seed-mix applications or possibly two soil types. The same comment I made three years ago still applies: The vegetation here features more alfalfa than I like, but diversity is good considering native grasses, subshrubs, and shrubs. The thick canopy in the west has taken a toll on small sagebrush plants, so density of that shrub is way down and rabbitbrush to a lesser extent because it is faster-growing. Overall, shrub density is half the 2011 level. Productivity is several times native vegetation in similar habitat.

T87	0-25 cm	26-50 cm	51-75 cm	75-100
	----------individuals/hectare----------			
Artemisia tridentata	400			
Ericameria nauseosa	400	1,200	500	500
Total	3,000/ha			

T90. This transect represents the long remediated strip north of a barbed-wire fence north of the stream and extending down to 12T365100. The sampled area was ungrazed when sampled in 2014. It is representative of a rather large area seeded for grazing-land use. Stratified plant cover was well over 100%. If revegetation in these areas degrades over time, it will most likely be a result of abusive grazing, or, on the Hazlet property, a combination of mowing and horse grazing. Previously there was a lot of Baltic rush in these areas, a wiry, unpalatable plant favored by harsh grazing, so grazing effects previously may have gone unnoticed.

REACH K (Change Order 25)

T88. The dense vegetation (Table 7) made counting the many shrubs difficult (Table 9). The following quantities are approximate and conservative.

T88	0-50 cm	50-100 cm
	----individuals/hectare-----	
Artemisia cana	5,900	13,900
Artemisia tridentata	2,800	8,000
Total	30,600/ha	

T89. While species-rich, cover is concentrated in alfalfa, which provides 60% of relative cover. Shrub density is good but pales in comparison to T88.

T89	0-50 cm	50-100 cm
	----individuals/hectare-----	
Artemisia cana	2,000	400
Artemisia tridentata	300	200
Ericameria nauseosa	200	300
Sarcobatus vermiculatus	500	
Total	3,900/ha	

REACH K (Outside Change Order 25)

T91. Transect 91 represents the old stream channel area and narrow flooplain between the two railroad lines just west of Miles Crossing. Mean cumulative seedling density was 3.3 per square foot with 90% frequency and some open water along the transect. The substrate is slightly contaminated along the BN bed in the eastern portion of the transect. The west has more legumes. Some Booth willow occurs along the transect.

T92. This transect is west of T91 but still above the box culvert where Silver Bow Creek passes south of the Rarus line and haul road, so like T91 it represents the old stream channel. Stocking is excellent at 4.5 per square foot with 100% frequency. Legumes include white clover and bird's-foot trefoil and alfalfa, but there is also some alkaligrass, although not too much.

T93. Transect 93 is in lower Reach K south of the creek. Mainly light-seeded species established here from broadcast-and- harrow seeding. At least the westen portion of this transect had wonderful sagebrush density, but now the thick alfalfa canopy (61% relative cover, with total stratified plant cover about 140%) covers the sagebrush. Mowing would be required to see them. I expect high sagebrush mortality from the dense overstory. Big bluegrass is the main grass.

T94. The final transect in Reach K is down toward the RR crossover north of the creek. Due to stream sinuosity, finding a place for a linear 100-m transect was difficult. This one starts near the haul road in upland hydrology (briefly) and crosses the floodplain in areas of subirrigated and transition-zone hydrology. Stratified plant cover was right at 100%. The main species was alfalfa with creeping meadow foxtail a distant second.

T94	0-50 cm	50-100 cm
	----individuals/hectare-----	
Artemisia cana	100	
Salix boothii	400	
Salix geyeriana	100	

Total 600/ha

REACH S

T4-1. This transect is in the old borrow area previously described, so revegetation dates to 2006. Hydrology is usually subirrigated, but at times a small amount of surface water can be seen to the east. In addition to the very coarse substrate, some contamination is evident, and the main species now is (unseeded) redtop. The fact that alfalfa relative cover is just 4% also indicates edaphic limitation, for such a coarse substrate at a subirrigated (or wetter) site makes fine alfalfa habitat. Perennial cover was 58%, a bit under the performance standard.

T4-1	0-50 cm	50-100 cm
	----individuals/hectare-----	
Artemisia cana	1,700	700
Ribes aureum	100	200

Total 2,700/ha

T4-40. This transect is located in southern Reach S west of the creek. The first 60 meters is in situ, the remainder imported coversoil. Kochia comprised more than half the relative cover. Otherwise, basin wildrye and big bluegrass are important.

T4-40	0-25 cm	26-50 cm	51-75 cm	75-100
	----individuals/hectare----			
Artemisia tridentata	500	in coversoil, not in situ		
Ericameria nauseosa	100			

Total 600/ha

T4-41. This coversoil-vegetation sample had almost as much big bluegrass and Indian ricegrass as kochia. But it seems that the kochia jungle impaired the perennial seeded, and perennial cover was about half the standard – but it will probably improve with time.

T4-41	0-25 cm	26-50 cm	51-75 cm	75-100
	----individuals/hectare----			
Artemisia cana	100			
Artemisia tridentata	700			
Ericameria nauseosa	100			

Total 900/ha

T4-42. The final canopy-coverage sample encompasses in situ soil and transition-zone hydrology. It has good diversity and perennial cover even if kochia comprises one-third of relative cover. The remaining kochia patches are less well-stocked with perennials.

T4-42	0-25 cm	26-50 cm	51-75 cm	75-100
	----------individuals/hectare----------			
Artemisia cana	100			
Atriplex canescens	300			
Total	400/ha			

Transects 4-43 through 4-49. These seven transects are adequately stocked with the exception of 4-47, which is marginal (Table 13). In general, incipient physiognomic diversity seems limited. The subshrub on Transect 4-47 is fringed sagewort.

REACH R

This is old transect 4-1. Now there is another transect labeled 4-1. I'll have to revise the numbering scheme, but for now the old designation is retained.

Old T4-1	0-25 cm	26-50 cm
	----individuals/hectare-----	
Ericameria nauseosa	500	1,000

Total 1,500/ha